

Paying for News: What Google and Meta Owe US Publishers

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Executive Summary

This paper estimates the payment that Facebook and Google Search platforms would owe to news publishers for the use of news content, if the Journalism Competition & Preservation Act (JCPA) comes into force. Existing deals made between these platforms and news publishers do not capture the full value generated by news content on the platforms. Using game theoretical insights into cooperative bargaining in cases where there is jointly-created value, we find a compelling case for a large payment from platforms to news publishers. Our contributions are not only that we provide a dollar amount for what is owed – which we estimate at between US\$11.9 billion and US\$13.9 billion a year in the United States – but also that we detail our methodology to enable others to replicate our work or use our approach to calculate a “fair payment” to publishers in other markets. We benchmark our estimates against recent agreements between news outlets and Google and Meta (previously known as Facebook), as well as with a database of licensing agreements made over recent decades for similar content-based products.

KEY FINDINGS

- Using game theoretical insights into cooperative bargaining in cases where value is jointly created, we find a compelling case for a large payment from platforms to news publishers.
- We first estimate (using a conservative assumption), that Facebook owes US\$1.9 billion to US publishers annually for use of their content on its platform.
- We estimate that US\$10–12 billion is owed by Google to US news publishers annually.
- Using existing platform-publisher agreements around the world as a benchmark, we find that a fair revenue split would give news publishers 50% of news-related revenue earned by Google and Facebook.
- We document that Google and Facebook are making payments to publishers around the world that are vastly below our estimates of a “fair payment”.

I. Introduction

Platforms and news publishers provide “complementary services,” i.e., the economic value generated by the two used together is greater than the net value they would produce in

isolation. This is one of the key facts to consider when answering the question of how to properly value content produced by news outlets and disseminated on search engines and social media. This question has recently come to the fore as governments around the world are pressing Google and Meta, Facebook’s parent company, to pay for the news they disseminate. In response, Google and Meta have said they will withdraw from news and that disseminating news is not essential for their business.¹ Indeed, publishers note that “referral traffic” from the platforms to their news sites has fallen in the last year.³

At the same time, platforms have been signing payment agreements directly with publishers and in some cases increasing the amounts they are paying to publishers.⁴ However, these agreements are highly opaque due to non-disclosure clauses, and the payment amounts are typically not made public. Furthermore, the exact methodology of how such payments are calculated is also not made public. Greater transparency in the underlying methodology for calculating these payments is needed to broaden the discussion and devise a standard that is fair and equally applicable to big and, critically, smaller media outlets.

This paper presents our methodology and estimates of what a fair payment from the Google Search and Facebook platforms to US media news outlets would be for the news content they distribute.⁵ To arrive at this figure, we estimate the revenues earned by the Google Search and Facebook platforms from news content (i.e., the “additional value” jointly created by the platforms and news publishers), and then divide the revenue between the platform and the media outlets in what would be a fair split. Based on economic theory and historical benchmarking analysis, we determine the fair revenue split to be 50-50, though our analysis considers a range of potential revenue splits of the value created from news content on large platforms. Our estimates take into account the value of news-related internet searches to

¹ Issac, M, Robertson, K. Grant, N. “Silicon Valley Ditches News, Shaking an Unstable Industry” *New York Times*, October 19, 2023. <https://www.nytimes.com/2023/10/19/technology/news-social-media-traffic.html>. Ingram, M. “Is Facebook Quitting the News Business?” *Columbia Journalism Review*, December 7, 2022. https://www.cjr.org/cjr_outbox/is-facebook-quitting-the-news-business.php

³ Issac, M, Robertson, K. Grant, N. “Silicon Valley Ditches News, Shaking an Unstable Industry” *New York Times*, October 19, 2023. <https://www.nytimes.com/2023/10/19/technology/news-social-media-traffic.html>

⁴ Author interviews carried out in 2023.

⁵ Google and Meta operate as ecosystems of different platforms that are more or less interconnected. Google, for example, owns and operates Android, Google Play Store, Google Search, YouTube, and others. Facebook’s parent company, Meta, owns and operates Facebook, Instagram, Threads, and WhatsApp. However, in this paper, when we talk about Google platform or platforms, Meta or Facebook platform or platforms, or simply “platforms,” we refer to Google Search and Facebook only.

Google, as well as the value created for Google, Meta and news publishers from the presence of news content on the Google and Facebook platforms.

We (conservatively) estimate that Facebook should provide an annual compensation of US\$1.9 billion to US publishers. We also estimate (conservatively) that Google should provide an annual compensation of US\$10–12 billion to US news publishers. In addition to estimating the annual compensation owed by platforms to US news publishers (US\$11.9–13.9 billion, conservatively), this paper also details our methodology so that it can be built on, refined and replicated by others. An important point that emerges from this research is that even large changes in our underlying assumptions—such as the exact fair revenue split between platforms and news publishers—provide robust support for the conclusion that the actual payments being made by platforms to media outlets are vastly less than a fair payment would be. We explain how we arrived at a 50-50 revenue split as the *fair* payment from platforms to news publishers. It is important to note that the 50-50 revenue split applies to revenue generated *only* from news content on the platforms, and not to the total revenue these platforms generate. As a percentage of total advertising revenue, we estimate that 6.6 percent of Facebook advertising revenues and 17.5 percent of Google search advertising revenues should be paid to news publishers on an annual basis.

The focus of this paper is on estimating the amounts owed to US publishers by Google and Meta. The question of how to disburse these payments is not addressed, as we have written extensively [elsewhere](#) about the options for how this can be done.⁶ It is important to note that platform remuneration alone will not “save journalism.”⁷ Recognizing this, Canada and Australia, for example, did not stop with the introduction of laws mandating platforms to negotiate with news publishers over revenue sharing in their respective markets, and these

⁶ See, e.g., Anya Schiffrin, Hannah Clifford, and Theodora Dame Adjin-Tettey, “Saving Journalism 2: Global Strategies and a Look at Investigative Journalism,” *Konrad-Adenauer-Stiftung*, January 18, 2022, <https://www.kas.de/de/web/usa/publikationen/einzeltitel/-/content/saving-journalism-2-global-strategies-and-a-look-at-investigative-journalism>. See also, Anya Schiffrin, *Konrad-Adenauer-Stiftung*, January 11, 2021 “Saving Journalism: A Vision for the Post Covid World,” <https://www.kas.de/en/web/usa/single-title/-/content/saving-journalism>.

⁷ See, e.g., Anya Schiffrin, Hannah Clifford, and Theodora Dame Adjin-Tettey, “Saving Journalism 2: Global Strategies and a Look at Investigative Journalism,” *Konrad-Adenauer-Stiftung*, January 18, 2022, <https://www.kas.de/de/web/usa/publikationen/einzeltitel/-/content/saving-journalism-2-global-strategies-and-a-look-at-investigative-journalism>. See also, Anya Schiffrin, *Konrad-Adenauer-Stiftung*, January 11, 2021 “Saving Journalism: A Vision for the Post Covid World,” <https://www.kas.de/en/web/usa/single-title/-/content/saving-journalism>.

countries have put in place a number of additional measures to support a healthy news ecosystem.⁸

The structure of the paper is as follows.

We first provide background on the Australian News Media Bargaining Code enacted in 2021 and discuss how interest in similar laws has spread, as well as the strong opposition to these laws expressed by both Google and Meta. We introduce our conceptual framework for analyzing the problem of how to calculate fair revenue shares between platforms and news publishers. We then introduce our methodology, and describe how the rise in advertising market share for Google and Meta has contributed to substantial market power for these platforms, and, consequently, the loss of revenue for news outlets. We calculate what we believe to be a fair and reasonable revenue sharing agreement between platforms and news publishers. We then review the few deals that have been made between news publishers and Google and Meta for which information is publicly available. Finally, we benchmark our estimates against a set of other licensing agreements to assess whether the revenue splits we propose are commensurate with the industry more broadly. We conclude by discussing some of the implications of our findings and avenues for future research.

Background

In 2021, Australia broke new ground⁹ by using competition law to require Google and Facebook to pay news publishers for the use of news content on their platforms. Despite the differences between the then-ruling Liberal party and the opposition Labor party, political parties across the spectrum, together with many news outlets and a number of NGOs, united¹⁰ around a common goal: passing legislation that requires Google and Meta to pay for the news content that they disseminate—a value-adding complement to their platforms. Worried about the power imbalance between media outlets and the tech giants, Rod Sims, then chair of the

⁸ For example, in 2019, Canada introduced a CAD\$595 million tax subsidy program called the Canadian Journalism Labour Tax Credit. See, Morneau, William Francis, “Investing in the Middle Class.” *Canada Federal Budget*, March 19, 2019, <https://www.budget.gc.ca/2019/docs/plan/budget-2019-en.pdf>.

⁹ Derek Wildling, “Regulating News and Disinformation on Digital Platforms: Self-Regulation or Prevarication?,” *Journal of Telecommunications & the Digital Economy* 9, No. 2 (2021): pp. 11-46, <https://doi.org/10.18080/jtde.v9n2.415>.

¹⁰ James Meese and Edward Hurcombe (2022), “Global Platforms and Local Networks: An Institutional Account of the Australian News Media Bargaining Code,” in *Digital Platform Regulation*, Terry Flew and Fiona R. Martin (Ed.), (London: Palgrave Macmillan, Cham) pp. 151-172, https://doi.org/10.1007/978-3-030-95220-4_8.

Australian Competition and Consumer Commission, proposed the News Media Bargaining Code in order to push “digital platform companies” to negotiate with media outlets. As the law stands, if a revenue sharing agreement between the parties is not reached, the government can step-in and require the two sides to enter binding arbitration in which both sides submit their final offers. The use of this “baseball-style” arbitration is key to ensuring a fair bargaining outcome, as it means that well-funded tech companies cannot drag out negotiations, thereby disadvantaging smaller outlets that do not have the resources to withstand a prolonged bargaining period. YouTube and Instagram were excluded from the Code in part because YouTube was already sharing revenue with its content creators, and Instagram was not, at that time, disseminating much news.

The Australian [Code](#),¹¹ which came directly out of the 2019 [Digital Platforms Inquiry](#),¹² was controversial. Critics argued that it would constitute a considerable gift to Murdoch-owned outlets while excluding the smaller, independent ones. Google and Facebook both lobbied hard against the Code and responded aggressively, with Facebook blocking Australian news¹³ for six days in 2021. However, since the law was passed, the estimated payout to Australian publishers has been about AU\$200 million (around US\$150 million) per year,¹⁴ with small as well as large outlets benefiting from the new legislation. News organizations receiving payments from the platforms employ some 85 percent of journalists working in the country. An Australian Treasury Department review of the Code in late 2022 deemed it “a success.” Hundreds of new jobs have been created as a result of the Code, with *The Guardian’s* Australian division adding 50 journalists to its newsroom.

Canada followed Australia’s new policy with its Online News Act¹⁵ (also known as C-18) passed in June 2023, to which Meta responded by blocking Canadian news from Facebook.¹⁶ Canada’s

¹¹ The Parliament of the Commonwealth of Australia, House of Representatives, “Treasury Law Amendment (News Media and Digital Platforms Mandatory Bargaining Code) Bill 2021, [“20177b01.pdf;fileType=application/pdf \(aph.gov.au\).”](#)

¹² Australian Competition & Consumer Commission, *Digital Platforms Inquiry, Final Report*, July 26, 2019, <https://www.accc.gov.au/about-us/publications/digital-platforms-inquiry-final-report>.

¹³ “Facebook Blocks Australian Users from Viewing or Sharing News,” *BBC News*, February 18, 2021, <https://www.bbc.com/news/world-australia-56099523>.

¹⁴ See, e.g., William Turvill, “‘Oh, yeah. It’s a big deal’: Meet the man who forced Google and Meta to start paying for news,” *PressGazette*, February 24, 2022, <https://pressgazette.co.uk/news-leaders/rod-sims-interview/>.

¹⁵ Government of Canada, “The Online News Act,” *Arts and Media, Canada.ca*, last modified October 3, 2023, <https://www.canada.ca/en/canadian-heritage/services/online-news.html>, (“The Online News Act”).

¹⁶ John Mazerolle, “Your Latest Questions about Bill C-18 and the Blocking of Canadian News Answered,” *CBC News*, August 3, 2023, <https://www.cbc.ca/news/world/c-18-your-questions-answered-1.6925260>.

law allows collective bargaining by news outlets with tech platforms, turning to arbitration by a government-appointed arbitrator as a last resort. The law takes a step towards transparency, requiring the terms of deals between platforms and publishers to be disclosed to a regulator (the Canadian Radio-Television Commission, or CRTC) within 15 days of an agreement being reached.¹⁷ Section 86(2)(b) of the Online News Act further notes that the auditor requires details on how much of the revenue shared with news publishers is spent on newsrooms. The Canadian Office of the Parliamentary Budget Officer estimates that news businesses should receive a total annual compensation of around CAD\$329.2 (around USD\$240 million) from digital platforms.¹⁸

In the US, the Journalism Competition and Preservation Act,¹⁹ which would allow collective bargaining by news publishers, was introduced in March 2023 by Democratic Minnesota Senator Amy Klobuchar.²⁰ On June 1 the California State Assembly passed²¹ the California Journalism Preservation Act, which would require large tech companies to share their advertising revenue with news outlets. However, the bill has been put on hold till 2024.^{22,23}

¹⁷ The Online News Act, §32(1), <https://laws-lois.justice.gc.ca/eng/acts/O-9.3/page-3.html#docCont>.

¹⁸ The Office of The Parliamentary Budget Officer, “Cost Estimate for Bill C-18: Online News Act,” October 6, 2022, <https://www.pbo-dpb.ca/en/publications/RP-2223-017-M--cost-estimate-bill-c-18-online-news-act--estimation-couts-lies-projet-loi-c-18-loi-nouvelles-ligne>.

¹⁹ 118th Congress - Senate – Judiciary, “S. 1094 -Journalism Competition and Preservation Act of 2023”, *congress.gov*, <https://www.congress.gov/bill/118th-congress/senate-bill/1094>.

²⁰ “Klobuchar, Kennedy Introduce Bipartisan Legislation to Save Local Journalism,” *Press Release*, March 31, 2023, <https://www.klobuchar.senate.gov/public/index.cfm/news-releases?ID=A3EDE58E-206C-4283-B1ED-3EA07DAC8EF8>.

²¹ Trần Nguyễn, “California Bill Requiring Big Tech to Pay for News Gains Momentum,” *AP News*, June 1, 2023, <https://apnews.com/article/google-meta-big-tech-journalism-fee-california-lawmakers-ec3a926252f59e589e5d48b067c7904e>.

²² “Assembly member Wicks, Senator Umberg Reach Agreement for Two-Year Bill (AB 886),” *Press Release*, July 7, 2023, <https://a14.asmdc.org/press-releases/20230707-assemblymember-wicks-senator-umberg-reach-agreement-two-year-bill-ab-886>.

²³ Jaimie Ding, “California bill requiring Big Tech to pay for news placed on hold until July 2024” *Los Angeles Times*, July 7, 2023. <https://www.latimes.com/business/story/2023-07-07/california-journalism-bill-on-hold-until-2024>.

In Brazil, attempts to introduce similar legislation were scuppered²⁴ in May 2023 but are currently being revived²⁵. Indonesia, New Zealand, South Africa²⁶ and Switzerland have all considered similar laws. Japan has also conducted a study on the online distribution of news content.²⁷ Globally, publishers have estimated what they believe they would be owed under similar platform remuneration acts. As a result, many outlets are now negotiating with Google for revenue sharing payments. Our interviews suggest that Google has been raising the amounts paid to publishers and at the same time, like Meta, suggesting that news is not core to their business and can be dropped or de-emphasized.²⁸

The Value of News and Profit Sharing in an Ideal World

In an ideal world, calculating the share of the platforms' advertising profits from news content could be accomplished in several ways. One direct approach would be to conduct an experiment that would quantify the decrease in profits for both platforms and publishers if Google and Facebook used no news content at all.²⁹ For example, a Randomized Control Trial ("RCT") could be conducted in which one randomly assigned group of users (the "treatment" group) would use a version of Google Search and/or Facebook *without* any news content, while another group (the "control" group) would use Google Search and/or Facebook as usual (with news content). Calculating the difference in per-user profits between the treatment and control groups (the "outcome of interest") would allow one to quantify the total additional profit

²⁴ Patricia Campos Mello, "An unholy coalition torpedoed social media reform legislation in Brazil," *Poynter*, May 17, 2022, <https://www.poynter.org/business-work/2022/an-unholy-coalition-torpedoed-social-media-reform-legislation-in-brazil/>.

²⁵ Anya Schiffrin "Brasilia Tries Again to Regulate Tech, Get Platforms to Pay for News" *Tech Policy Press*, September 29, 2023, <https://techpolicy.press/brasil-diary-brasil-tries-again-to-regulate-tech-get-platform-to-pay-for-news/>

²⁶ South Africa's competition commission has opened a "market inquiry" into media and digital platforms. https://www.compcom.co.za/wp-content/uploads/2023/09/MDPML_Administrative-timetable_final22.pdf

²⁷ For more information see: "Market Study Report on News Content Distribution" September 21, 2023 <https://www.jftc.go.jp/en/pressreleases/yearly-2023/September/230921.html>.

²⁸ Author interviews in 2023.

²⁹ The additional profit generated by a policy change or other economic activity is generally used by economists to measure the net economic value of that activity. Profits (rather than revenues) are a more appropriate measure of economic value, since new economic activity might affect both a firm's revenues as well as costs. However, we focus below on calculating a fair *revenue* split between the publishers and platforms both because revenues are easier to measure, and because we do not expect the costs associated with serving news content to be significant enough to materially affect the results of our analysis.

generated from news content on tech platforms. Unfortunately, an experiment of this kind is impractical to conduct in the real world for multiple reasons.³⁰

A more feasible approach would entail for platforms and publishers to make available (anonymized) internal usage micro-level data for economists to analyze, either voluntarily or, perhaps, as required by law. For example, if one could calculate Facebook’s advertising revenue from each user, and measure the share of time that each of these users spent consuming and interacting with news content, the researcher could allocate the advertising revenue associated with each user to news content versus other types of the content on the platforms. Similarly, if researchers had access to the share of news content-related informational searches done on Google, they could calculate the share of advertising revenues that might reasonably be attributed to news content.

In the absence of a direct measurement of profits from news content or having access to micro-level internal platform usage data, other analytic approaches might consider, for example, the amount by which advertiser spending would change if the large tech platforms no longer published news content.

In the following section, we explain the conceptual framework behind our methodology, describe the methodology itself, and note its main limitations.

“The Real World” Methodology for Estimating The Value of News and Profit Sharing

The Conceptual Framework

Facebook and Google Search are what economists refer to as “digital platforms”—services that create value by facilitating interactions between different groups of users. Facebook brings together creators of social media content (including advertisers) with consumers of that content; without both of these groups, the Facebook platform would not generate economic

³⁰ Creating two different versions of platforms and deploying them to different groups of users would be costly and difficult, but plausible. However, requiring participating advertisers to choose whether they want to advertise on either or both the two versions of platforms is not.

value.³¹ Similarly, Google Search brings together internet users performing searches for information on the World Wide Web with information sources and content creators, such as news publishers.

As we noted, through an economic lens, large digital platforms and news content creators provide “complementary services,” meaning that they create more economic value when used together, rather than when they are used separately. For the digital platforms, news media provides a source of high-quality content to keep their users engaged and coming back to the platforms. Likewise, for news publishers, the platforms provide popular, easy-to-use channels through which to distribute news content to a larger audience. Presently, the large digital platforms in the US dominate digital advertising markets, allowing them to retain essentially all of the economic value they create jointly with news publishers.³²

One of the key considerations in our framework is the recent trend of news content publishers facing ever-increasing difficulties to properly monetize their content. We do not observe that demand for news content has declined. Indeed, as discussed later, consumption of news content is as robust as ever, even as the main delivery channels have transitioned from print to online.³³ Online news consumption takes place through news websites and apps, and through digital platforms. However, a robust demand for news content did not prevent digital platforms from increasing their ability to dictate the terms under which they conduct business with other firms in their industry, a phenomenon referred to as “market power” by economists. This increase in platforms’ market power has been one of the key drivers behind an accelerated decline of advertising revenues for news content creators in the past two decades.

³¹ Without users and advertisers posting pictures, videos, writing, internet links, and other media on Facebook, the platform would not have content to show the users who log-in to Facebook to consume social media content. Likewise, without users who wish to consume advertisements and other social media content on its platform, Facebook would not be able to attract advertisers or other content producers who value the platform for its ability to disseminate the content that they produce. Thus, platforms provide value only when they are able to attract both *content consumers* and *content producers*.

³² On a related note, in January 2023, the US Department of Justice, together with a number of state attorneys filed an antitrust lawsuit against Google for monopolizing multiple digital advertising technology products. In the complaint, they allege that that Google monopolizes key digital advertising technologies, or the “ad tech stack,” that website publishers depend on to sell ads and that advertisers rely on to buy ads and reach potential customers. See, e.g., “Justice Department Sues Google for Monopolizing Digital Advertising Technologies,” US Department of Justice press release, January 24, 2023, <https://www.justice.gov/opa/pr/justice-department-sues-google-monopolizing-digital-advertising-technologies>.

³³ We are grateful to Professor Andrea Prat for providing this point.

Several governments and independent analysts have concluded that platforms hold significant market power in their relationship with news publishers.³⁴ This market power is derived both from the considerable share of the digital advertising market that the platforms possess (in addition to the control that platforms exert over the advertising market more broadly), and from the vast number of users who consume their news mostly or solely through the platforms. Importantly, both Facebook and Google Search provide snippets and/or headlines from the news, reducing the likelihood of users clicking to access the original content on the publishers' websites. For example, a user's Facebook "feed," the platform's main source of content, might include a headline announcing the winner of a recent sporting event or awards ceremony. The user may be able to click on the headline—redirecting them to the news publisher's website and generating advertising revenue for the publisher—or the user may enjoy some benefit from consuming only the headline, then opting to continue scrolling on Facebook without leaving the platform. In the latter case, Facebook benefits from the news publisher's content without the publisher being compensated for that content. **In the absence of market power and in the presence of greater transparency, publishers would be able to negotiate a fair share of the value platforms derive from news content, including from these news snippets.**³⁵

The question of how to split the value created when two parties interact with each other has rich foundations in economics. The canonical economic "bargaining model" was developed by the Nobel Laureate, Professor John Nash in the 1950s.³⁶ Since then, a number of studies have provided game theoretic foundations and further insight into how jointly-created value should be split in cooperative bargaining situations.³⁷ In our analysis, these theoretical underpinnings provide one input for determining a fair revenue split, the other being an analysis of historical benchmarks. Notably, however, economic theory has found equitable divisions of value (i.e., a

³⁴ See, for example, "Competition Issues Concerning News Media and Digital Platforms," *OECD*, 2021, OECD Competition Committee Discussion Paper, <https://www.oecd.org/daf/competition/competition-issues-in-news-media-and-digitalplatforms.htm>. An exception is a recent Meta-funded report from March 2023 that focuses only on Facebook and argues that such market power does not exist and that news content is substitutable on Facebook. See, "Meta and the News: Assessing the Value of the Bargain." <https://www.nera.com/publications/archive/case-project-experience/meta-and-the-news--assessing-the-value-of-the-bargain-.html>

³⁵ Josh Benton, "If Google had real competition in search how would news publishers' world change?" *NiemanLab*, October 4, 2023, <https://www.niemanlab.org/2023/10/if-google-suddenly-had-real-competition-in-search-how-would-news-publishers-world-change/>.

³⁶ John Nash, "The Bargaining Problem," *Econometrica* **18** (2) (1950): 155–162.

³⁷ See, e.g., Ariel Rubinstein, "Perfect Equilibrium in a Bargaining Model," *Econometrica* **50** (1) (1982): 97–109.

50-50 split in a two-party negotiation) to be one of the likely outcomes of models based on both equilibrium notions and fairness norms.³⁸

In this study, we first estimate the size of the “additional value” jointly created by tech platforms and news publishers working together, and then calculate what a fair division of this value would be across the two complementary services.

Methodology Overview

Our approach involves a series of steps. We start by estimating the platforms’ revenue from news content sourced from US news publishers. This content provides value to platforms by contributing to user impressions, a primary source of revenue for online platforms.

³⁸ For equilibrium-based models, see, e.g., Ehud Kalai, “Proportional solutions to bargaining situations: interpersonal utility comparisons,” *Econometrica* 45(7) (1977): 1623-1630; Roth, Alvin E. Roth and Michael W. Malouf, “Game-theoretic models and the role of information in bargaining,” *Psychological Review* 86(6) (1979): 574-594; Alvin E. Roth, “Toward a focal-point theory of bargaining,” *Game-theoretic models of bargaining* 259 (1985): 265-267., among others. For models based on fairness, see, e.g., Gary E. Bolton, “A comparative model of bargaining: Theory and evidence,” *The American Economic Review* 81(5) (1991): 1096-1136; Matthew Rabin, “Incorporating fairness into game theory and economics,” *The American Economic Review* 83(5) (1993): 1281-1302; Ernst Fehr and Klaus M. Schmidt (1999). “A theory of fairness, competition, and cooperation,” *The Quarterly Journal of Economics* 114(3) (1993): 817-868; Gary E. Bolton and Axel Ockenfels, “ERC: A theory of equity, reciprocity, and competition,” *American Economic Review* 91(1) (2000): 166-193; James Andreoni and B. Douglas Bernheim, “Social image and the 50–50 norm: A theoretical and experimental analysis of audience effects,” *Econometrica* 77(5) (2009): 1607-1636.

Why impressions matter

“User impressions” is a metric used to quantify the number of times a user views a website where an advertisement is displayed. It measures user engagement with the content on their screen and increases the chance that users will view and notice advertisements.

Platforms can monetize impressions data when selling advertisements. However, user impressions are not just valuable because they help platforms monetize ad sales. Impressions are also valuable to platforms because they capture users’ preferences when users look at content on the platform*. Since impressions also provide information on how user attention to content evolves, platforms rely on these data to continuously re-optimize the design of their platforms to maximize engagement from both users and advertisers.

Impressions are, therefore, fundamental to the business model of platforms. Varied, credible and timely publisher-derived news content contributes to impressions and enhances the value of the platform for users, ultimately increasing the time audiences spend on the platform.

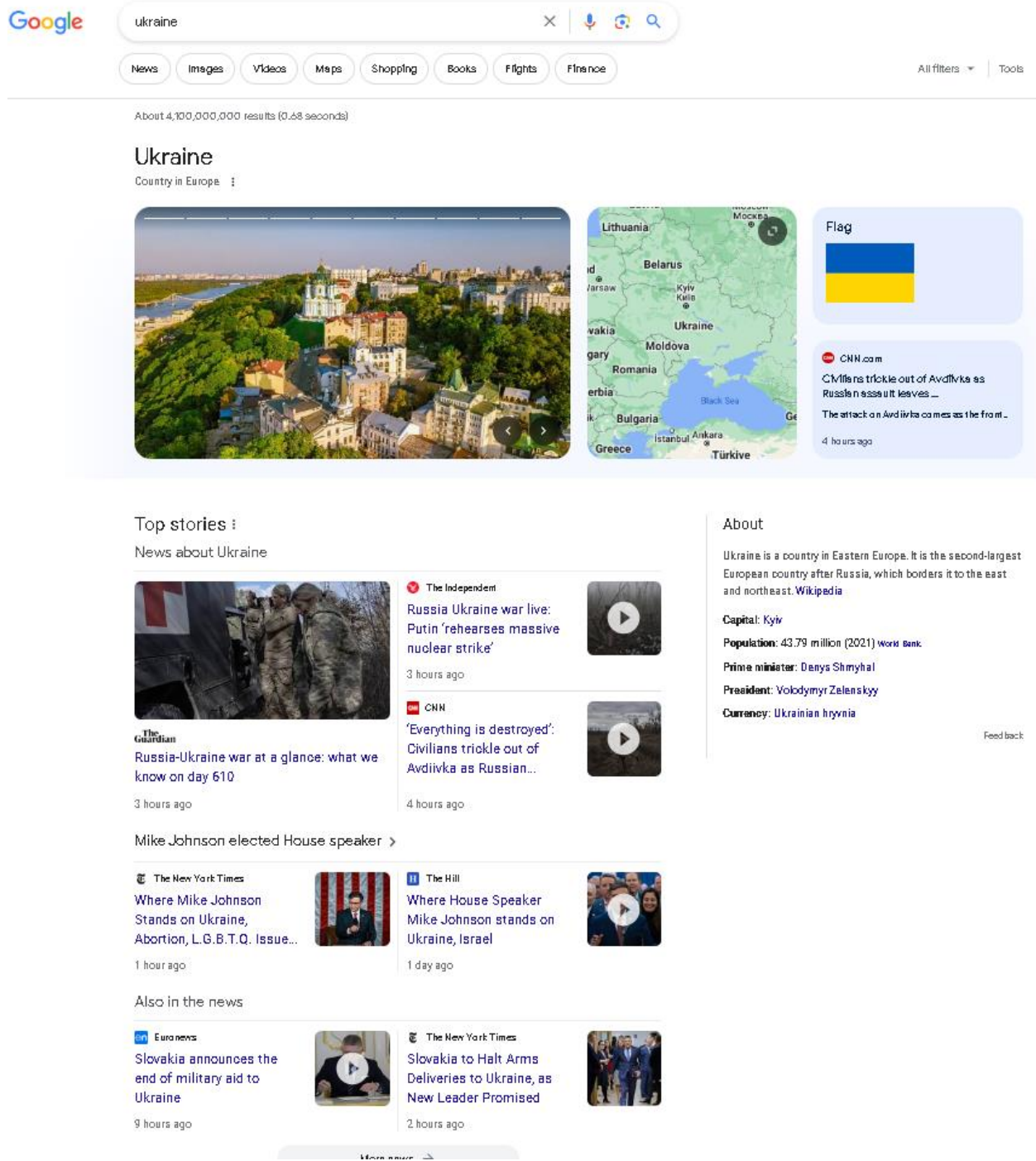
* Platform policy and law changes due to privacy concerns make it less likely each individual user is tracked and individually monetized. Users’ preferences are typically aggregated.

By focusing on impressions, we emphasize the importance of news to users of the platforms, irrespective of whether the user chooses to click-through a link to the news content on the publisher’s website when using the platform.³⁹ The decision to click-through a link in order to view a full news article is typically made *after* the user has already viewed the headline, and

³⁹ “Click-through” is the action of a user of clicking on (or following) a link that opens a new webpage or a website. The “click-through rate,” defined as the ratio of user clicks on a link and the number of times a page, email, or advertisement displaying the link is shown, is one of the metrics used to measure the performance of advertising campaigns on the Internet, including website, email, and other campaigns.

(very often) a short summary or a preview of the content of the full article. If the user merely wants to search for a simple fact or news headline, they can read it from the search results page directly rather than clicking-through on an individual search result link.

FIGURE 1: GOOGLE SEARCH RESULTS FOR “UKRAINE”



Sources: Google search performed in Chrome on October 26, 2023.

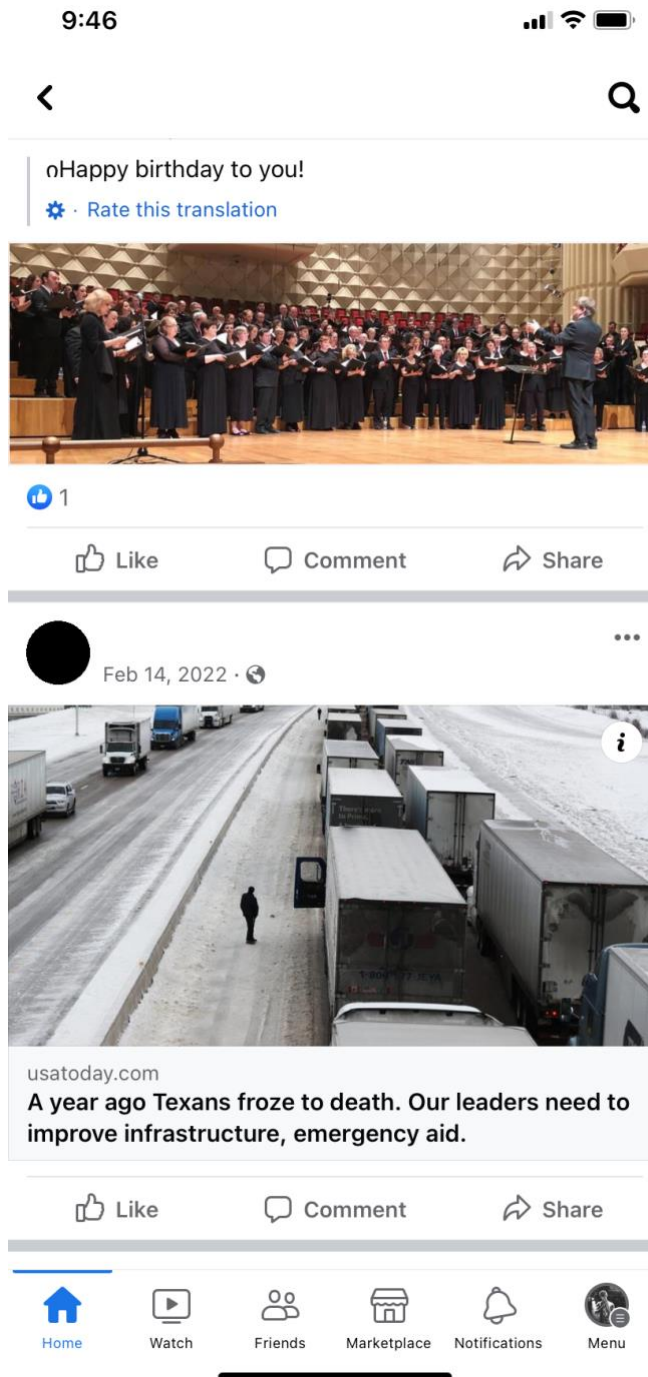
For example, as illustrated in Figure 1, if one were interested in information about Ukraine, simply performing a Google search for “Ukraine” displays “top news” on the top of the results webpage, consisting mostly of news headlines and article previews. As these news summaries

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themselves provide value to the internet user, click-through metrics alone cannot capture the total value generated from news content consumed by users on the platform. Our methodology takes this into account, and differs from an approach that focuses only on estimating underpayments by platforms to publishers due to users clicking-through to publishers' websites.

A similar phenomenon occurs with news summaries that appear in the feeds of Facebook users. If a Facebook user clicks on a news article that appears on their Facebook feed, the publisher then has a chance to monetize that user's attention, for example, by displaying ads accompanying the article that the user reads on the publisher's website. However, users that do not click on articles in their Facebook feeds may still receive value from the article summary appearing in their Facebook feed, while Facebook also receives value, as it leverages news publishers' content to increase user engagement. However, the publisher that originally created the content receives no payment for that content. Figure 2 below shows an example of an article from a Facebook feed which might provide value for both Facebook and the user without the user clicking on the link to the publisher's website.

FIGURE 2: FACEBOOK FEED WITH NEWS ARTICLE



As noted above, our estimates of the value that news publishers provide to platforms are conservative. As a part of the analysis, we document the size of the search engine and social media advertising market in the US. In the case of Google, we draw on a 2023 study by Fehr

Advice & Partners AG in Switzerland (“the Fehr study”) which compares the user behavior of those using a version of Google search *without news content*, with those using a “real” Google search *with news content*. The Fehr study finds that without news, users engaged far less with Google search.⁴⁰ This study gives us data on the share of users seeking news content as an essential feature of the Google search platform. We combine these data with the revenue Google generates from search advertising to estimate the value of news content on the Google Search platform. For Facebook, an analogous methodology is used to value the information sourced from news snippets and headlines that appear on the Facebook platform. We use the survey data from recent economic research on Facebook usage to calculate the share of time users spend consuming news content on the platform.

How the value of news content should be split between the platform and publisher can be calculated using different rules. As discussed, we take a simple approach in this paper and start with insights from the economics of bargaining to determine the most likely split of the economic “surplus” (the additional economic value) generated from online news content between the platform and the publishers.⁴¹ We also rely on historical benchmarks (discussed subsequently) to support our contention that a 50-50 revenue split is the most reasonable starting point for our analysis.⁴² However, it worth noting that researchers and policymakers have considered other splits. For example, the Fehr study” considers assigning 40 percent of revenue to the publishers.⁴³ To provide further context, we benchmark our estimates with a set of comparable agreements where data on revenue sharing between the supplier of content and a platform is available, including private market analyst reports.

⁴⁰ Alexis Johann, Mia Drazilova, Sarah Treweller and Julian Möhlen, “The Value of Journalistic Content for the Google Search Engine in Switzerland,” *FehrAdvice & Partners AG*, March 2023, pp.41 and 44, https://fehradvice.com/wp-content/uploads/2023/04/2023_04_21_study_journalistic_value_google_en.pdf.

⁴¹ Barry Nalebuff, *Split the Pie: A Radical Way to Negotiate*, (New York City: HarperCollins, 2022).

⁴² Barry Nalebuff and Adam Brandenburger, “Rethinking Negotiation: A Smarter Way to Split the Pie,” *Harvard Business Review*, November-December 2021, <https://hbr.org/2021/11/rethinking-negotiation>.

⁴³ Alexis Johann, Mia Drazilova, Sarah Treweller and Julian Möhlen, “The Value of Journalistic Content for the Google Search Engine in Switzerland,” *FehrAdvice & Partners AG*, March 2023, pp.41 and 44, https://fehradvice.com/wp-content/uploads/2023/04/2023_04_21_study_journalistic_value_google_en.pdf. The authors choose a 40/60 split based on studying revenue sharing standards in online advertising between content providers and marketers, and then extending the argument to sharing with media publishers.

Limitations of our Methodology

In this report, we have relied on extant studies that estimate the demand for news-related searches and time spent consuming news content on the platforms. We use these studies to estimate the impressions of news content on large tech platforms. In addition, we use public data on payments platforms have made to publishers (where available), as well as other licensing agreements in the public domain (as benchmarks). The main contribution of our analysis is that it simultaneously quantifies the fair payments owed to publishers, and finds a general conclusion—robust to changes in underlying assumptions—that the current payments made by the platforms are much lower than they should have been.

The lack of publicly available, detailed micro-data on user behavior from Google and Facebook (Meta) proved to be one of the key limiting factors affecting our analysis.⁴⁴ In addition to helping researchers allocate revenue to news publisher content more precisely, these data could also be used to help implement other study designs (the analysis of effects of news content removal from the platforms, for example). In some instances, Google and Facebook have dropped news content in retaliation for policy changes that would make them pay for this content. For example, Facebook dropped news content from its platform in Canada in 2023 to protest the C-18 bill, but data on the effect that this decision has had on traffic to publisher websites is not publicly available. The same is true for the period in 2021 when Facebook dropped Australian news (although the short duration of this episode of only six days would make the true effects of this change difficult to measure). Similarly, in 2014, Spanish publishers collectively requested that news aggregators pay for linking to their content. The plan was to have the payments earned from licensing fees managed by a third-party entity, which would then share these revenues with Spanish news publishers. In response, Google openly criticized this “link tax” and dropped Spanish news from Google Search results for eight years.⁴⁵ To analyze the effects of this change in Spain, for example, researchers would need to incorporate

⁴⁴ Interestingly, Meta appears to offer some limited academic access to Facebook data via CrowdTangle platform. One recent study by Professor Jean-Hugues Roy used a CrowdTangle data sample to look at Canadian audience interaction with news on Facebook and concluded that, for the sample he looked at, the interactions with news were 5.3% of all interactions. However, Meta currently appears to limit the list of permissible study topics to only five: Misinformation, Elections, COVID-19, Racial justice and Well-being. In the “Frequently Asked Questions” section of the CrowdTangle webpage, Meta specifically notes that it “cannot currently provide access for research topics not listed above. See, <https://help.crowdtangle.com/en/articles/4302208-crowdtangle-for-academics-and-researchers>.

⁴⁵ Anya Schiffrin and Elena Herrero-Beaumont, “Making Big Tech Pay for News: What Can We Learn from Spain?” *MediaPowerMonitor*, July 7, 2023, <https://mpmonitor.org/making-big-tech-pay-for-news-what-can-we-learn-from-spain/>.

data on how users substituted to news coming from other countries outside Spain, since Google search only dropped Spanish news.

Similarly, due to lack of adequate data, we were unable to incorporate the reported effect of Facebook reducing news content on their websites into our analysis.⁴⁶ From an economics standpoint, we view the news content on platforms as a “must-have,” since the news content cannot be easily reduced or substituted for without the platform incurring substantial decreases in value and revenue. When it comes to Google Search, information searches are a substantial share of the overall platform usage. For a social media website like Facebook, under our argument, any reduction in news content would make the platform less valuable to users, and would lead to an erosion of platform value and revenue. Unfortunately, since analyzing the net effect of Facebook’s reduction in news content on the company’s revenues requires additional (years of) specific market segment data that are not available, we were unable to incorporate it in this study.

Below, we review some of the ways in which platforms currently generate value for news publishers. The payments owed from platforms to publishers should be calculated net of any value that publishers are already receiving from platforms. This value may be in the form of payments that platforms are already making publishers, or it may be driven by the increased readership of news publications that is due to the existence of Google’s and Facebook’s platforms. For example, using Google’s 2014 decision to drop Google News in Spain, researchers Susan Athey, Mark Mobius, and Jenő Pál estimate the value created by Google News for Spanish news publishers.⁴⁷ Absent user level data or data generated by a “natural

⁴⁶ See Mike Isaac, Katie Robertson and Nico Grant, “Silicon Valley Ditches News, Shaking an Unstable Industry,” *The New York Times*, October 19, 2023, <https://www.nytimes.com/2023/10/19/technology/news-social-media-traffic.html>.

⁴⁷ Susan Athey, Markus Mobius and Jenő Pál, “The Impact of Aggregators on Internet News Consumption,” *National Bureau of Economic Research Working Paper*, May 2021, https://www.nber.org/system/files/working_papers/w28746/w28746.pdf. The paper does not study news consumption through Google Search, which is the focus of the present study.⁴⁸ See, e.g., Anya Schiffrin, André Corrêa d’Almeida, Adelina Yankova, Lindsay Green-Barber and Dylan W. Groves, “Understanding Journalism Impact: a Multidimensional Taxonomy for Professional, Organizational and Societal Change,” *Journal of Journalism and Applied Media Studies*, September, 2023, https://intellectdiscover.com/content/journals/10.1386/ajms_00121_1. See also, Anya Schiffrin, Joseph Stiglitz, Dylan Groves, “UNESCO Issue Brief: The role of journalism in promoting democracy, political accountability and sustainable development” (forthcoming). It is worth highlighting, however that, as an Economics Professor at Sciences Po in Paris, Dr. Julia Cagé noted, even poor quality news carried on the platforms should still be paid for.

experiment” of the type performed in Spain in 2014, estimating the value currently generated by platforms for news publishers is difficult to estimate in the US reliably.

State of the Industry and Recent Trends

The major platforms’ substantial market power in procuring news content has important consequences for social welfare. News publishers perform the important social function of providing timely information to the public, as well as creating awareness of social issues; undercompensating news publishers may result in not only harm to the news industry, but also broader societal harm associated with the public being less informed. Elsewhere, we have summarized the empirical studies carried out by economists and political scientists regarding the importance of news to governance, accountability and democracy.⁴⁸

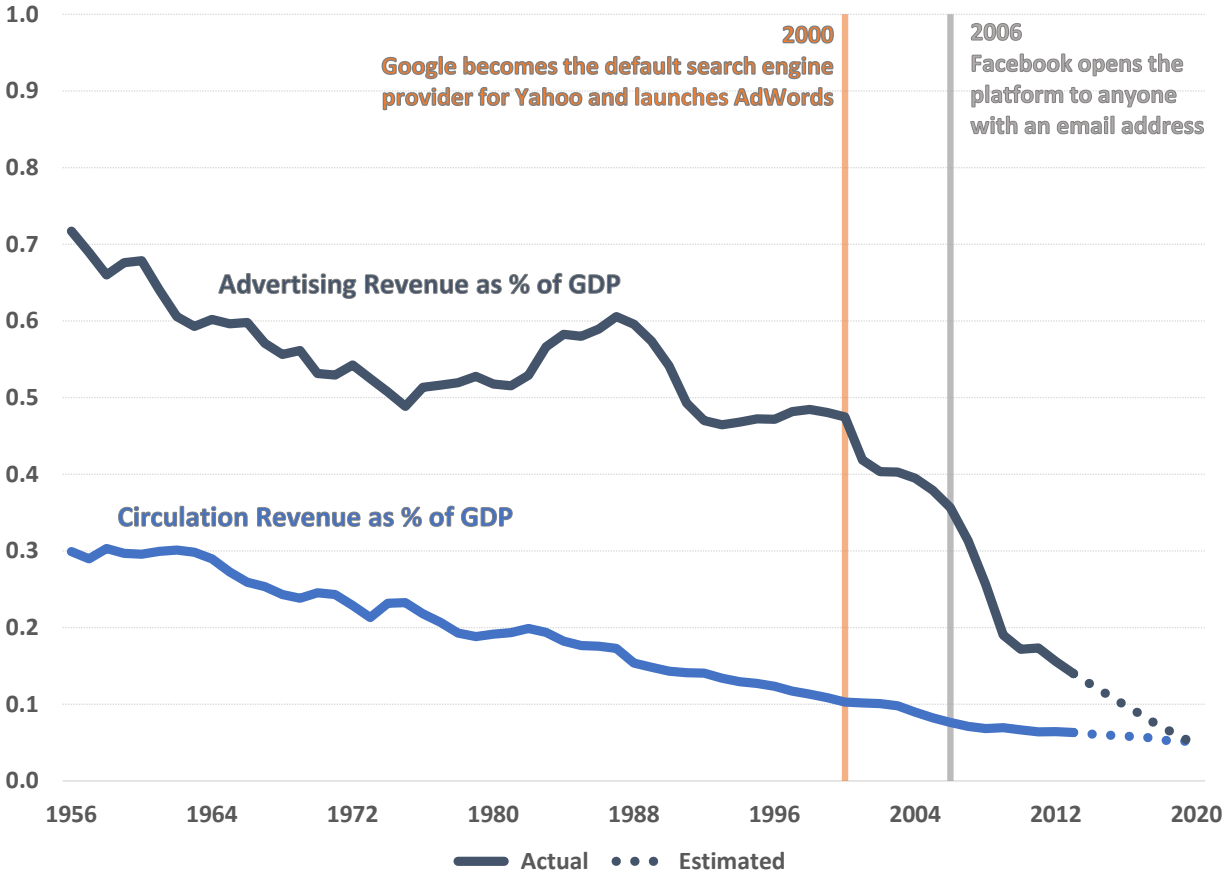
Figure 3 plots the total revenue of US newspapers as a percentage of GDP. Revenue data is gathered from Pew Research. While the total revenue fraction has been secularly falling during the period for which data are available, there is a noticeable, precipitous drop from 2004 to 2006, mostly due to a large decrease in advertising revenue share. We also note two important events on the timeline, which provide additional context for these trends: the point in time when Google became the default search provider for Yahoo, cementing its internet search dominance, and the point in time that Facebook opened its platform to anyone with a registered email address. Similarly, the number of newsroom employees has been falling over the same period (Figure 4). A recent example of newsroom layoffs are those at Gannett, a local newspaper publisher, which laid off some 400 employees in 2022.⁴⁹ These declines have coincided with a drop in newspaper circulation (Figure 5). The accelerated decline in circulation and advertising revenue has occurred largely in the past 15 to 18 years.

⁴⁸ See, e.g., Anya Schiffrin, André Corrêa d’Almeida, Adelina Yankova, Lindsay Green-Barber and Dylan W. Groves, “Understanding Journalism Impact: a Multidimensional Taxonomy for Professional, Organizational and Societal Change,” *Journal of Journalism and Applied Media Studies*, September, 2023, https://intellectdiscover.com/content/journals/10.1386/ajms_00121_1. See also, Anya Schiffrin, Joseph Stiglitz, Dylan Groves, “UNESCO Issue Brief: The role of journalism in promoting democracy, political accountability and sustainable development” (forthcoming). It is worth highlighting, however that, as an Economics Professor at Sciences Po in Paris, Dr. Julia Cagé noted, even poor quality news carried on the platforms should still be paid for.

⁴⁹ See, e.g., Angela Fu, “Gannett Lays Off Roughly 400 Staff After Dismal Second-Quarter Results,” *Poynter*, August 12, 2022, <https://www.poynter.org/business-work/2022/gannett-lays-off-journalists-after-dismal-second-quarter-results/>.

The decline in newspaper print circulation, however, masks the continuing popularity of newspapers as a source of news. In Figure 6, data from Pew Research shows that news websites or apps are the most popular source of news for US adults. Similarly, Press Gazette’s ranking of the top news websites in the US for August 2023 shows that four out of the top 10 are newspapers.⁵⁰ Therefore, it is not that people are not interested in news or newspapers. Rather, consumers have shifted their consumption on to the internet. However, publishers are clearly struggling to monetize this online interest, as evidenced by declining advertising revenue trends (Figure 3). As discussed previously, monetizing user interest becomes difficult when platforms command substantial market power in the advertising market.

FIGURE 3: REVENUE OF NEWSPAPERS AS A PERCENTAGE OF US GDP

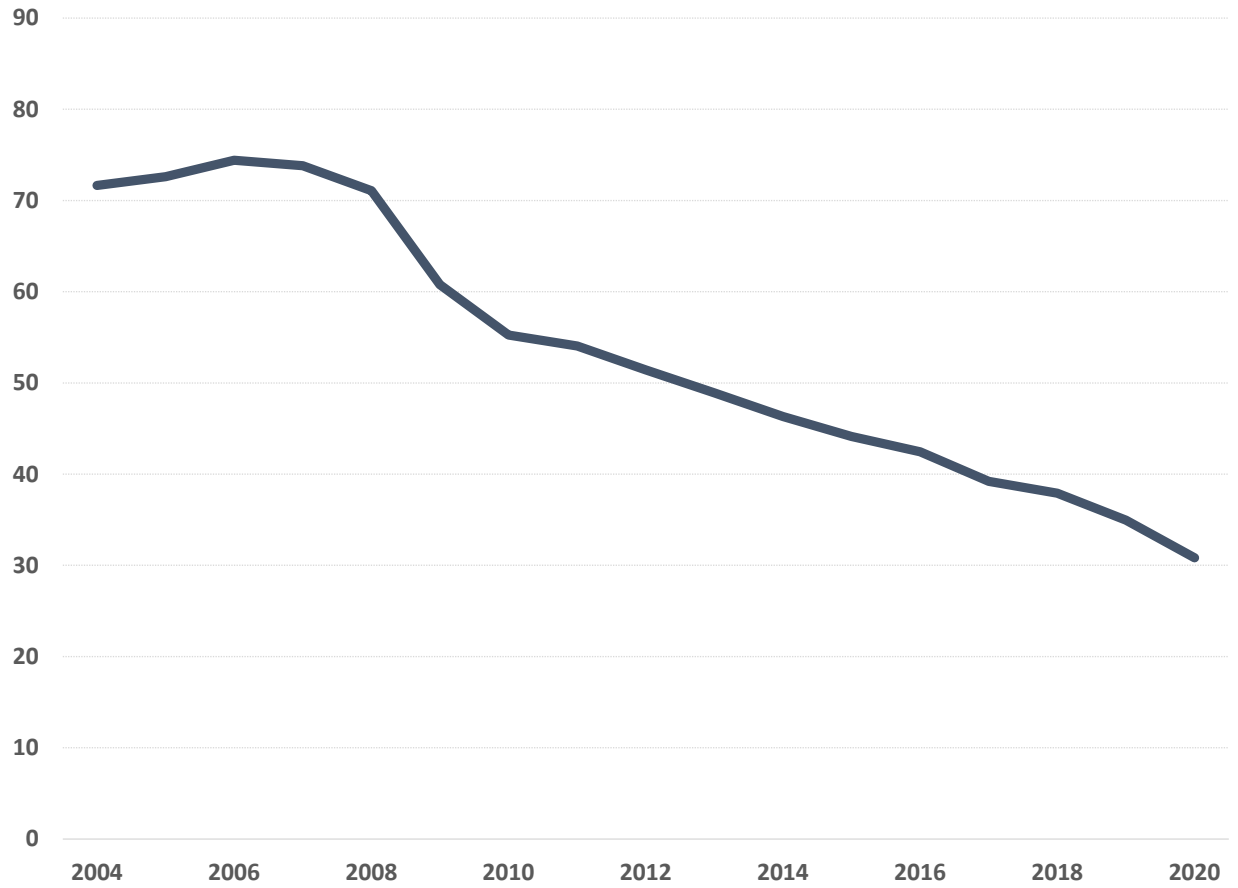


Sources: Pew Research Center, “Newspaper Fact Sheet”, 2021. GDP data from FRED. Sarah Phillips, “A brief history of Facebook,” *The Guardian*, Jul 25, 2007,

⁵⁰ Aisha Majid, “Top 50 news websites in the US: AP, CBS and Independent saw biggest growth in August,” *PressGazette*, September 12, 2023, <https://pressgazette.co.uk/media-audience-and-business-data/media-metrics/most-popular-websites-news-us-monthly-3/>.

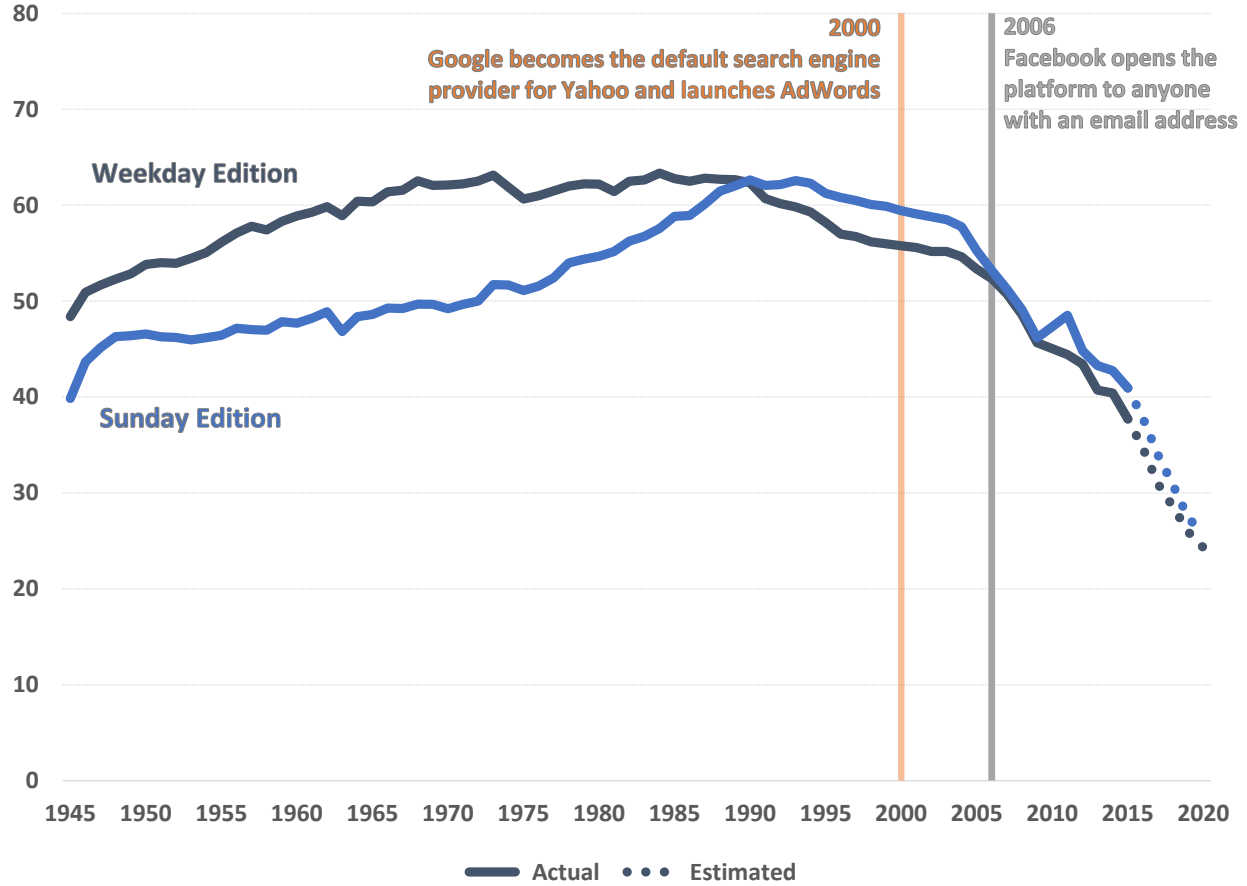
<https://www.theguardian.com/technology/2007/jul/25/media.newmedia>. Mehta et al., “Google's 25-year journey from dorm to internet dominance,” *Reuters*, September 27, 2023, <https://www.reuters.com/technology/googles-25-year-journey-dorm-internet-dominance-2023-09-26/>.

FIGURE 4: TOTAL NEWSROOM EMPLOYEES IN THE NEWSPAPER SECTOR (IN THOUSANDS)



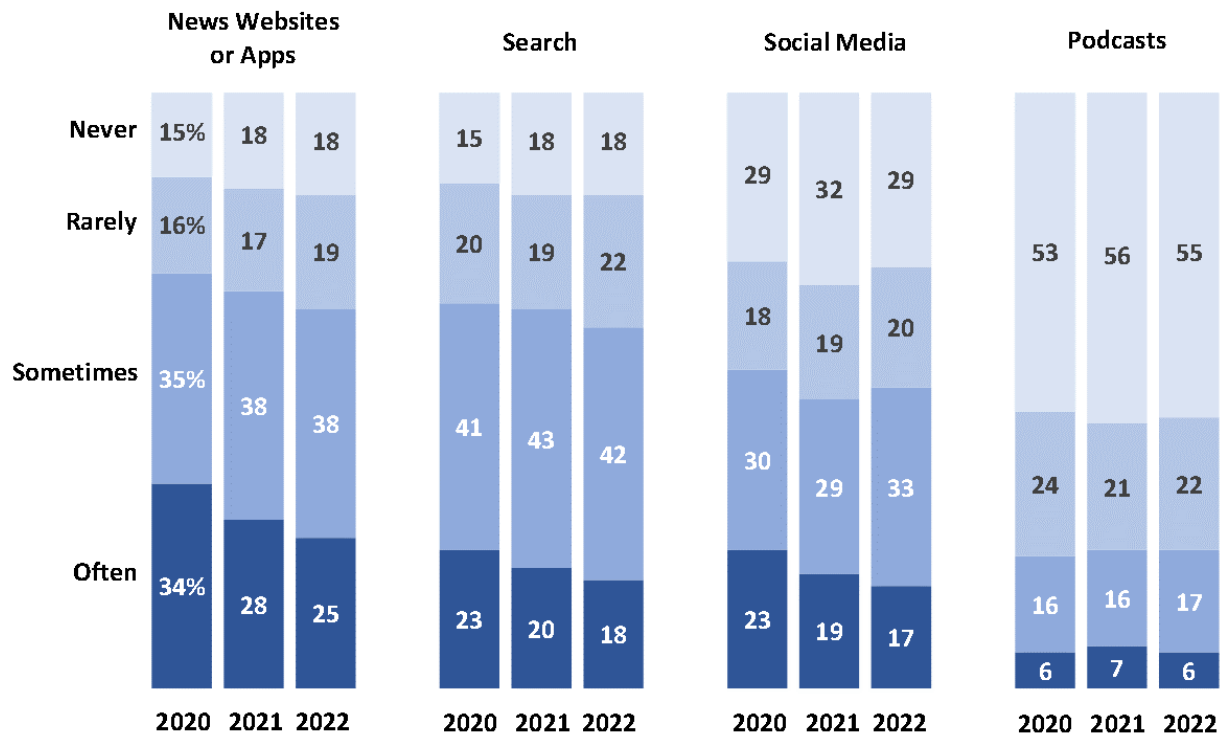
Source: Pew Research Center, “Newspaper Fact Sheet”, 2021.

FIGURE 5: TOTAL ESTIMATED CIRCULATION OF US DAILY NEWSPAPERS (IN MILLIONS)



Source: Pew Research Center, “Newspaper Fact Sheet”, 2021. Sarah Phillips, “A brief history of Facebook,” *The Guardian*, Jul 25, 2007, <https://www.theguardian.com/technology/2007/jul/25/media.newmedia>. Mehta et al., “Google’s 25-year journey from dorm to internet dominance,” *Reuters*, September 27, 2023, <https://www.reuters.com/technology/googles-25-year-journey-dorm-internet-dominance-2023-09-26/>.

FIGURE 6: NEWS CONSUMPTION ACROSS DIGITAL PLATFORMS (SHARE OF US ADULTS, 2020-2022)



Sources: Reproduced from Pew Research Center, “News Platform Fact Sheet”, 2022.

The drop in demand for newspaper advertising has been drastic enough that some regions in the US don’t have any newspapers at all anymore. These places, called “news deserts” by Penelope Abernathy, include some 200 US counties (or just over 6 percent of all counties in the US).⁵¹ In addition, more than 1,500 counties (or close to 48 percent of all counties in the US) have only one newspaper, in many instances published just once per week.⁵² As discussed later (see, for example, Figure 7), the share of US social media users who get news from social media has remained constant for the last ten years.^{53,54} This coincides with a steady rise in advertising

⁵¹ According to US Census, there are 3,144 counties in the US. See, The United States Census Bureau, “Growth in the Nation’s Largest Counties Rebounds in 2022,” Press Release Number CB23-52, March 30, 2023, <https://www.census.gov/newsroom/press-releases/2023/population-estimates-counties.html>.

⁵² See, Penelope Muse Abernathy, “The Expanding News Desert,” *UNC Hussman School of Journalism and Media*, <https://www.usnewsdeserts.com/#viz1626105082044>.

⁵³ Getting news from social media need not imply that users actually visit the linked content on the news website. They may consume news directly from the social media page itself, from the headline, or accompanying description.

⁵⁴ The demographics of news consumption falls along expected lines. According to Pew Research, 91% of those of ages 18-24 get news at least sometimes from digital devices. This share is 88% for ages 30-49, and falls to 67%

Continued on next page

revenues for these platforms. Since platforms derive advertising revenues through user impressions, and a considerable fraction of impressions comes from news-based content, at least part of the loss of advertising for newspapers must be due to advertising taken up by platforms. Given the negative welfare consequences of some US citizens having no access to newspapers, and the considerable evidence of market power held by Google and Facebook, it is necessary to determine the payment that would be owed by these platforms to news publishers under a competitive, well-functioning market for news content.

Revenues Generated from News Content

Given the limitations described above, in this section we describe the blueprint for estimating the amount of revenue that Google and Facebook derive from news content.

Facebook—the importance of impressions

Facebook is the biggest social media platform in the world, with close to three billion monthly active users.⁵⁵ According to eMarketer, the company generated US\$50 billion in digital display advertising revenues in the US in 2022 alone, and the platform accounted for more than 10 percent of all digital advertising, and close to 35 percent of all display advertising revenue in the

for ages 65+. Among digital sources, news websites and social media dominate for all age categories, with 76% of ages 18-24 and 58% of ages 30-49 consuming news from social media at least some times. The percentages for search are comparable, 70% and 65% respectively. 33% of ages 18-24 and 15% of ages 30-49 *prefer* getting news from social media. Pew Research Center, “News Platform Fact Sheet,” 2022. It is also interesting to note that 26% and 40% of those who regularly consume news on Facebook are of ages 18-29 and 30-49 respectively. Pew Research Center, “Social Media and News Fact Sheet”, 2022.

⁵⁵ As of June 2023, Facebook reported having 3.03 billion monthly active users (MAU), and 2.06 billion daily active users (DAU) on average. However, the company also reported that duplicate accounts might represent 11 percent or more of total worldwide MAUs. See, Meta Platforms, Inc. (2023), Form10-Q for the Quarterly Period ended June 30, 2023, <https://www.sec.gov/Archives/edgar/data/1326801/000132680123000093/meta-20230630.htm>.

US in 2023.⁵⁶ According to a recent report released by the US House of Representatives, the average American spends close to 50 minutes every day on the platform.⁵⁷

Multiple surveys indicate that news is an integral part of Facebook's content.⁵⁸ News is presented through snippets and headlines shared by users, and by discussions on Facebook itself. According to the Reuters Institute, social media was a source of news for around 48 percent of Americans in 2023, a share that has remained relatively stable over the past five years (see Figure 7).⁵⁹ The importance of Facebook for news dissemination and consumption in the US is well established. For example, using data from international surveys that include the US, the Reuters Institute Digital News Report 2023 finds that almost one third of Americans use Facebook for sharing news in the US (see Figure 8).

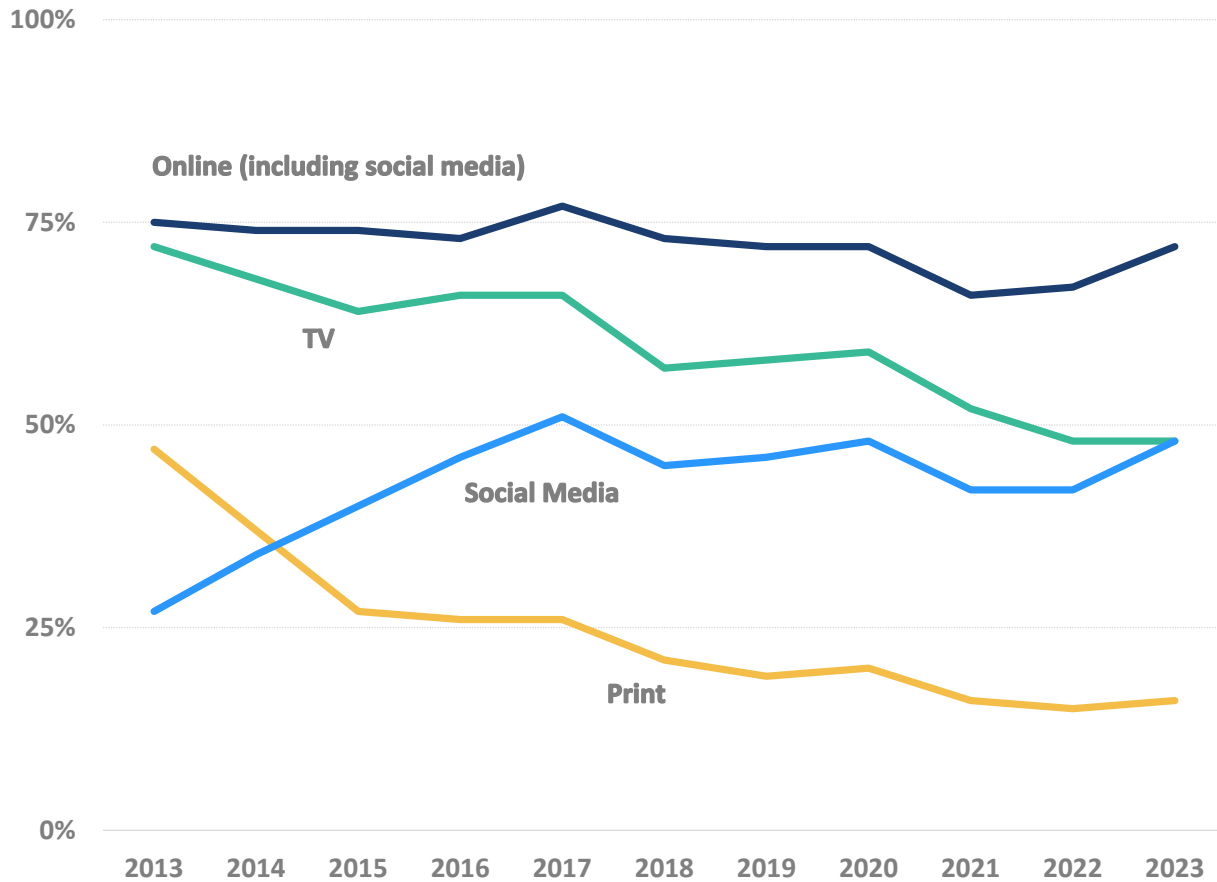
⁵⁶ "Digital Ad Revenue Share, by Company," Insider Intelligence eMarketer, March-May 2023, <https://www.insiderintelligence.com/forecasts/584b26021403070290f93a4a/5851918a0626310a2c1869c2/>. For a description of some of the different kinds of online advertising see here: <https://www.coursera.org/articles/display-advertising>.

⁵⁷ "According to Facebook's internal market data, its users spend significantly more time on its family of products than on competing services. For example, social media users spent more time on Facebook (48.6 minutes) than on Snapchat (21 minutes) or Twitter (21.6 minutes) in 2018." Majority Staff Subcommittee on Antitrust, Commercial and Administrative Law, "Investigation of Competition in Digital Markets", *U.S. Government Publishing Office*, July 2022, page 115, <https://www.govinfo.gov/content/pkg/CPRT-117HPRT47832/pdf/CPRT-117HPRT47832.pdf>.

⁵⁸ Relatedly, in the 2018 annual report, Facebook highlights the News Feed as one of the key drivers of the observed revenue growth: "In 2017 compared to 2016, the average price per ad increased by 29%, as compared with approximately 5% in 2016, and the number of ads delivered increased by 15%, as compared with approximately 50% in 2016 [...] The increase in the ads delivered was driven by an increase in users and their engagement and an increase in the number and frequency of ads displayed on News Feed [...]" See, Facebook, Inc. (2018), "Form10-K", *U.S. Securities and Exchange Commission*, <https://www.sec.gov/Archives/edgar/data/1326801/000132680119000009/fb-12312018x10k.htm>. News Feed is now known as Feed. Content on the Feed includes news as well as content from a user's network.

⁵⁹ The exact annual social media shares reported by Reuters Institute are 46, 48, 42, 42, and 48 percent for 2019, 2020, 2021, 2022, and 2023, respectively. See, Reuters Institute Digital News Report, <https://www.digitalnewsreport.org/>.

FIGURE 7: SOURCES OF NEWS IN THE US, 2013-2023



Source: Adapted from Reuters Institute Digital News Report 2023. Data for US.

FIGURE 8: 2023 TOP SOCIAL MEDIA AND MESSAGING IN THE US

Rank	Brand	For News	For Any Purpose
1	Facebook	29%	59%
2	YouTube	24%	59%
3	X (Twitter)	14%	25%
4	Instagram	12%	35%
5	Facebook Messenger	7%	35%

Source: Adapted from Reuters Institute Digital News Report 2023. Data for the US. “For News” means the fraction of people surveyed who use the corresponding app to share news. “For Any Purpose” refers to the fraction of people surveyed who use the corresponding app.

The question is: how critical is news content to the Facebook experience? The Reuters Institute Digital News Report suggests that for Facebook users, news is critical.

We argue that news content is a “must-have” for online platforms, comparable to “must-runs” in the TV broadcasting context. News content is an essential part of the social media experience and a source of useful information desired by audiences. Therefore, in the “counterfactual” world in which Facebook must pay for news content on its platform, the platform would choose to pay, rather than permanently removing news from its platform for US users. Thus, we are interested in the share of impressions that come from news as a first step in calculating what such a fair payment would be. Impressions, as explained above, are a measure of user engagement that act as a proxy for the number of times users view content on Facebook, such as an advertisement or hyperlinked content shared by other Facebook users. We focus on impressions because they are arguably a better measure of the value generated from news content on Facebook than other measures such as the number of links clicked-through by Facebook users. Our methodology relies on evidence that news content enhances the user experience and extends the time spent on the platform, thereby generating additional advertisements on the platform. Thus, the value generated by news content is not captured by merely measuring advertisement clicks or clicks on news content.

Although we do not have access to data on the exact number of news article impressions shown to Facebook users, a study on US users by Allcott et al. (2020) provides survey responses that can be used to estimate the number of news impressions on Facebook, as follows:⁶⁰

$$\text{Share of time spent on Facebook consuming news} = \frac{\text{Facebook's share of total news consumption} \times \text{Total news consumption time}}{\text{Total time spent on Facebook}}$$

⁶⁰ Hunt Allcott, Luca Braghieri, Sarah Eichmeyer, and Matthew Gentzkow, “The Welfare Effects of Social Media,” *American Economic Review*, Vol. 110, No. 3 (2020): 629-76, <https://www.aeaweb.org/articles?id=10.1257/aer.20190658>.

The Starting Point: Economic Studies of News Consumption on Facebook

In their 2020 study published in the prestigious *American Economic Review*, professors Hunt Alcott, Luca Braghieri, Sarah Eichmeyer, and Matthew Gentzkow conducted a survey and asked respondents about their news consumption from various sources. This publicly available survey data is an excellent resource for estimating users' share of Facebook time spent consuming news on the platform.

The authors provide programming code to replicate their analysis, which we first used to clean and format the raw survey response data from the study. We then use the cleaned and formatted response data to calculate the proportion of time respondents spent consuming news through each source, and estimate Facebook's share of each respondent's total news consumption.

To estimate the share of time each respondent spent on Facebook consuming news, we first multiply the amount of time each respondent reported to have spent consuming news by Facebook's share of each respondent's total news consumption, and then divide the resulting product by the total time spent on Facebook. The resulting share of time each respondent spent on Facebook consuming news is 13.2 percent. This is slightly lower than an estimated 20 percent share based on the average daily time spent on the platform as reported by Facebook to the House of Representatives Subcommittee in 2018 (48.6 minutes per day; see footnote 22), and slightly higher than 5.3 percent of all interactions for Canadian audience estimated in a recent study by Professor Jean-Hugues Roy based on a sample of 30,000 Facebook posts from Canada.* Since this measure fails to capture the benefits from news publications to Facebook outside of direct ad revenue generation, this 13.2 percent share likely represents a lower to middle-ground estimate of the total value generated by news publishers for Facebook. As noted by Hunt Alcott, Matthew Gentzkow and Lena Song in another important study, "habit formation" on Facebook is a gradual process that requires repeated use of the Facebook platform.† Facebook users spending more time on the platform due to news content offers one channel through habit formation might occur.

* Jean-Hugues Roy, "Facebook profits from Canadian media content, but gives little in return," *The Conversation*, October 1, 2020, <https://theconversation.com/facebook-profits-from-canadian-media-content-but-gives-little-in-return-146385>.

† Allcott, Hunt, Matthew Gentzkow, and Lena Song, "Digital Addiction," *American Economic Review*, 112 (7): 2424-63, 2022, <https://www.aeaweb.org/articles?id=10.1257/aer.20210867>.

According to Meta—Facebook’s parent company—in 2022, Meta generated close to US\$114 billion in advertising revenues globally, of which the company apportioned close to US\$53 billion to activity of users located in the US and Canada.⁶¹ Although Meta notes that revenue from Monthly Active Users (“MAUs”) of Facebook or Messenger “represents the substantial majority of our total revenue,” the company does not directly separate out Facebook advertising revenues from those of its other platforms. However, Meta does separately provide numbers of Daily Active Users (“DAUs”) and MAUs for Facebook only and for the whole “Family of Apps Products”⁶² Using DAU and MAU numbers, we can estimate the share of Facebook users to be somewhere between 68 and 79 percent of all users of Meta’s platforms.⁶³ According to recent eMarketer analysis, Facebook’s share of Meta’s advertising revenues is 62 and 59 percent in 2022 and 2023, respectively.⁶⁴ We conservatively use 59 percent as Facebook’s share of Meta’s total advertising revenue. In its annual report, Meta apportioned about 94 percent of total 2022 Facebook revenue generated in US and Canada to customers with addresses in the US.⁶⁵ Since 13.2 percent of the time Facebook users spend on the platform consuming or interacting with the news content, we estimate that about US\$3.8 billion of advertising revenues in the US are generated through news content.⁶⁶ After benchmarking from a database of royalty agreements (see below), we follow the industry norm of a 50-50 split between the platforms and news publishers for the advertising revenue

⁶¹ Meta apportioned the revenue based on where users were located “when they performed a revenue-generating activity.” See, Meta Platforms, Inc., Form 10-K for the Fiscal Year Ended December 31, 2022, p. 63, accessed August 25, 2023, <https://www.sec.gov/Archives/edgar/data/1326801/000132680123000013/meta-20221231.htm>.

⁶² Meta’s “Family of Apps Products” comprise Facebook, Instagram, Messenger, and WhatsApp. See, Meta Platforms, Inc., Form 10-K for the Fiscal Year Ended December 31, 2022, p. 7, accessed August 25, 2023, <https://www.sec.gov/Archives/edgar/data/1326801/000132680123000013/meta-20221231.htm>.

⁶³ Meta reports 2.96 billion of daily active people for its Family of Apps Products, and 2 billion of daily active users for Facebook only, indicating that 68 percent of daily active persons use Facebook. Similarly, 3.74 billion of monthly active persons are reported for the Family of Apps Products, and 2.96 billion of monthly active users for Facebook only, indicating that 79 percent of monthly active persons use Facebook. See, Meta Platforms, Inc., Form 10-K for the Fiscal Year Ended December 31, 2022, p. 56, accessed August 25, 2023, <https://www.sec.gov/Archives/edgar/data/1326801/000132680123000013/meta-20221231.htm>

⁶⁴ Sara Lebow, “Facebook still generates most of Meta’s ad revenues, as Instagram drives growth,” eMarketer Insider Intelligence, December 21, 2022, <https://www.insiderintelligence.com/content/facebook-still-generates-most-meta-ad-revenues-instagram-drives-growth>.

⁶⁵ Share of total US & Canada revenue that Meta apportions to Facebook users with addresses in the US was 94.3%, 93.9%, and 94.1% for 2020, 2021, and 2022, respectively. See, Meta Platforms, Inc., Form 10-K for the Fiscal Year Ended December 31, 2022, p. 99, accessed August 25, 2023, <https://www.sec.gov/Archives/edgar/data/1326801/000132680123000013/meta-20221231.htm>.

⁶⁶ \$53B x 59% x 94% x 13.2% = \$4.5B

attributable to the time spent consuming news on the Facebook platform. Using this 50-50 rule implies that approximately US\$1.9 billion of advertising revenues should be allocated to news publishers.⁶⁷ In Table 1, we show how this payment estimate would change if different revenue splits—either 40-60 or 30-70—were to be used instead. Even when revenue splits favoring the platforms more are used, the resulting advertising revenues that should be allocated to news publishers are substantially higher than what the platforms appear to be paying now.

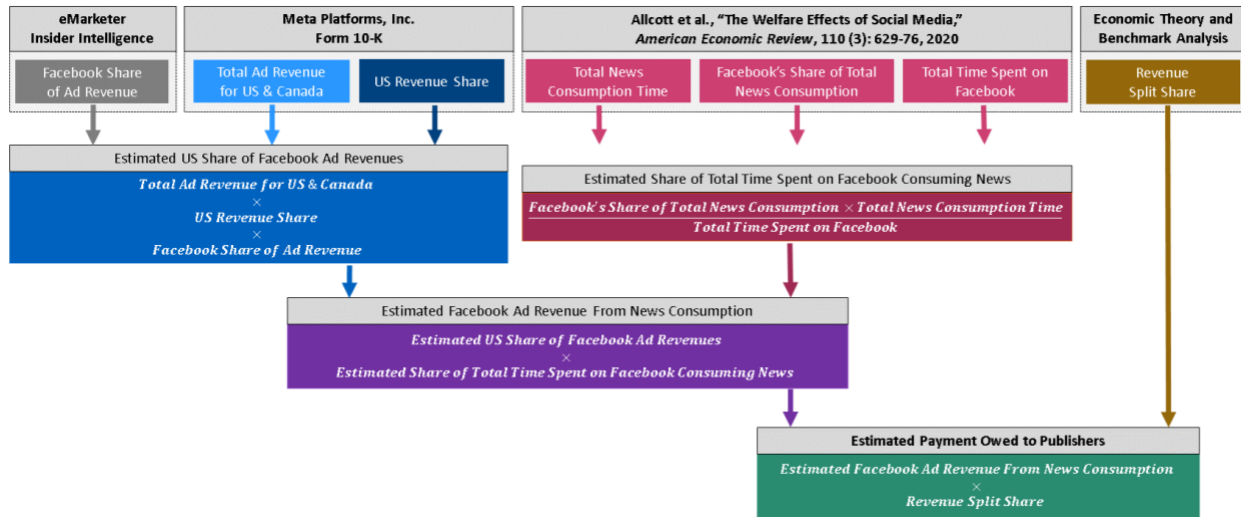
TABLE 1: OTHER POSSIBLE REVENUE SPLITS AND PAYMENTS DUE TO PUBLISHERS FROM FACEBOOK

Revenue Sharing (Publishers-Platforms)	50-50	40-60	30-70
Advertising Revenue Due to Publishers	\$1.9 billion	\$1.5 billion	\$1.2 billion

Our methodology for estimating the total share of Facebook advertising revenue that should be paid to publishers is illustrated in Figure 9 below.

⁶⁷ According to Dr. Hal Singer (“Singer analysis”), news media publishers transacting with social media platforms in a competitive input market should be paid their marginal revenue product, which in this case would be all revenue that Facebook generates from news. In other words, as Dr. Singer argues, news publishers should receive all US\$3.8 billion of revenues from Facebook. This estimate is about 2.5 times as high as the JP Morgan analysts’ estimate of approximately 5 percent of local advertising revenue to be paid to news publishers. In the case of the US, that would amount to somewhere around US\$1.5 billion in 2022. See Hal J. Singer, “Second Round Comments in Response to U. S. Copyright Office’s Publishers’ Protection Study: Notice and Request for Public Comment,” 86 Fed. Reg. 56721, October 12, 2021, <https://www.econone.com/wp-content/uploads/2021/12/Addressing-the-Power-Imbalance-Between-News-Publishers.pdf>. See also, Don Carducci and Abhinay Jeggannagari, “Nine Entertainment: Nine Scores a Try with Stan Sports - Worthy of another upgrade,” J.P. Morgan, February 24, 2021. See also, Don Carducci and Abhinay Jeggannagari, “Australian Media Sector: Upgrade cycle: started from the bottom now we’re here,” J.P. Morgan, May 03, 2021.

FIGURE 9: ESTIMATING TOTAL SHARE OF FACEBOOK ADVERTISING REVENUE DUE TO PUBLISHERS



Google—about one-third of all user demand finds news content indispensable

Google is an advertising behemoth that commands over 90 percent of the US search engine market,⁶⁸ and around two thirds of the total US search advertising market.

Calculating the payment owed to publishers by Google is straightforward. Google searches often return results that include news snippets. One approach would estimate the share of results that depend on content from news publishers. Another approach, suggested by the Fehr Study, relies on survey data just as Allcott et al. do.⁷⁰ For consistency, and to maintain comparability with previous section, we proceed with the survey approach.

Google’s search advertising revenues in the US were estimated to be around US\$56 billion in 2022, and projected to grow to over US\$57 billion in 2023, and US\$61 billion in 2025.⁷¹

⁶⁸ “Desktop & Mobile Search Engine Market Share Worldwide,” *GlobalStats Statcounter*, July 2009- July 2023, <https://gs.statcounter.com/search-engine-market-share/desktop-mobile/worldwide/#monthly-200901-202307>.

⁷⁰ Alexis Johann, Mia Drazilova, Sarah Treweller and Julian Möhlen, “The Value of Journalistic Content for the Google Search Engine in Switzerland,” *FehrAdvice & Partners AG*, March 2023, https://fehradvice.com/wp-content/uploads/2023/04/2023_04_21_study_journalistic_value_google_en.pdf.

⁷¹ “Google Search Ad Revenues,” *Insider Intelligence eMarketer*, March-May 2023, <https://forecasts-na1.emarketer.com/591373e4aeb8830e3829e400/59e7c295bfce890eb411ec5a>.

According to the Fehr Study, the share of information searches can be estimated to be between 50 and 60 percent of all searches. If we (conservatively) assume that the share of information searches is around 50 percent, then Google generates around US\$30 billion from advertisements related to information searches. Survey information from the Fehr Study further tells us that, within information searches, the share of user demand for results coming from news media publishers is 70 percent. In other words, 35 percent of all demand for searches in the US is from users seeking news media content.⁷² Thus, the total advertising revenue Google generates from information searches using media publishers’ content is around US\$21 billion. This revenue from information search using media publishers’ content is the value of news content in the Google context.

Assuming a 50-50 revenue split between Google and news media publishers, the publishers’ revenue share can be estimated to be in the US\$10–12 billion range.⁷³ In Table 2, we show how this payment estimate would change if a different revenue split—either 40-60 or 30-70—were to be utilized. Even when these revenue splits favoring the platforms more are used, the resulting advertising revenues that should be allocated to news publishers are substantially higher than what the platforms appear to be paying now.

TABLE 2: OTHER POSSIBLE REVENUE SPLITS AND PAYMENTS DUE TO PUBLISHERS FROM GOOGLE

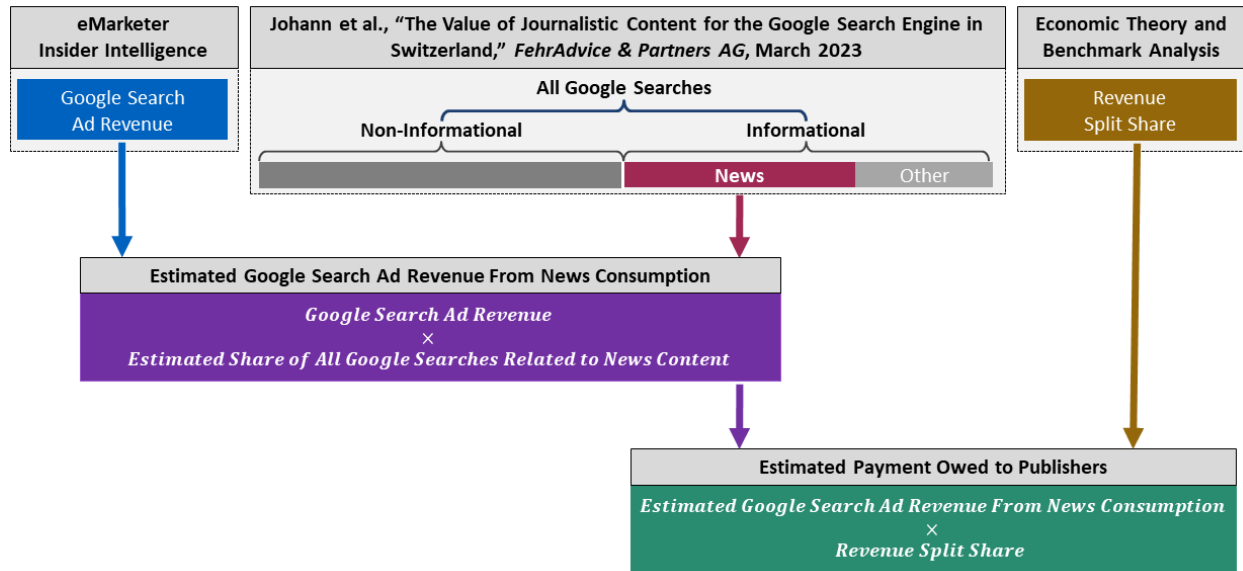
Revenue Sharing (Publishers-Platforms)	50-50	40-60	30-70
Advertising Revenue Due to Publishers	\$10–12 billion	\$8–9.5 billion	\$6–7 billion

Our methodology for estimating the total share of Google search advertising revenue that should be paid to publishers is illustrated in Figure 10 below.

⁷² See, Fehr Study, p. 38. $50\% \times 70\% = 35\%$. Admittedly, one could also approach this problem from the supply side and try to estimate a share of search results that include content from news publishers (like the ACCC study) as a proxy for value that news content contributes to Google search. For example, the ACCC report notes that “approximately 8 per cent to 14 per cent of Google Search queries from devices in Australia led to the appearance of Top Stories on the Google Search results.” However, the Fehr study addresses the issue from the demand side and asks the question that we find to be more economically relevant to the issue at hand: for how many people is news content a must-have? In doing so, the Fehr study gives us a highly relevant estimate of user-base for which the news content is indispensable.

⁷³ The Fehr Study opts for a 40-60 split which produces an estimated payment of US\$8 billion.

FIGURE 10: ESTIMATING TOTAL SHARE OF GOOGLE SEARCH ADVERTISING REVENUE DUE TO PUBLISHERS



Benchmarking Revenue-Sharing Arrangements

In the previous sections, we established how much money Google and Meta make from news, and allocated 50 percent of news-related revenue to publishers. In this section, we compare our estimates and revenue sharing rule with real world examples. Here, we benchmark our estimates against existing deals between platforms and publishers, as well as provide historical benchmarks of revenue-sharing in the media industry. The historical benchmarks include licensing agreements that go back to the 1990s (including royalties payments), and thus set a benchmark for the industry standard. More recent agreements between news publishers and Google and Meta are mostly covered by non-disclosure agreements, but some amounts have been made public.

Existing Deals and Market Analyst Reports

In recent years, Google and Meta have announced agreements with publishers in many countries. A short survey of these agreements provides a notion of the amounts involved, as well as of the agreements' limitations.

The nature of such partnerships presents several limitations. First, in a market where platforms possess high market power, any deal that is negotiated will underpay publishers. Second, there is no way to empirically diagnose whether small and local publishers are adequately compensated by existing deals. Third, despite the existence of such deals, legislation was still passed in some countries, suggesting that the payments were insufficient in size and/or specifics.⁷⁴ For example, even while Google and Meta announced deals with publishers in Canada, the legislature still passed news bargaining code C-18.

Google's Deals with Publishers

While most of the deals that Google makes with publishers are restricted by non-disclosure agreements, there are some for which public information is available. A number of these deals are discussed below. As can be seen, the amounts currently being paid are far below our estimate of an equitable revenue split. It should be noted that in some cases, Google has made it clear that the payment agreements will no longer be valid in cases where governments introduce platform remuneration laws such as the Australian News Media Bargaining Code.⁷⁵ Thus, publishers have an incentive to sign deal with Google and then oppose the new platform remuneration laws. Indeed, this has occurred in a number of countries.

In February 2023, the New York Times Company announced an expanded agreement on “news and innovation,” that included content distribution and subscriptions.⁷⁶ In May 2023, *The Wall Street Journal* reported that, as a part of a broad deal with Google, *The New York Times* should get around US\$100 million from Google over three years as a part of a deal that allows Google to feature *New York Times* content on its platforms.⁷⁷

In February 2021, two Australian publishers, Seven West Media and Nine Entertainment Co. (the publisher of *The Sydney Morning Herald* and *The Age*), separately announced their

⁷⁴ See, e.g., Anya Schiffrin, “News Publishers Across the Globe are Presenting Big Tech with a Bill,” *Poynter*, May 23, 2023, <https://www.poynter.org/business-work/2023/news-publishers-facebook-meta-google-money/>.

⁷⁵ “8 Facts About Google and the News Media Bargaining Code,” *The Keyword*, Google, January 22, 2021, <https://blog.google/around-the-globe/google-asia/australia/8-facts-about-google-and-news-media-bargaining-code/>.

⁷⁶ “The New York Times Company and Google Expand Agreement on News and Innovation,” *The New York Times Company*, *The New York Times*, February 6, 2023, <https://www.nytimes.com/press/the-new-york-times-company-and-google-expand-agreement-on-news-and-innovation/>.

⁷⁷ Alexandra Bruell, “New York Times to Get Around \$100 Million from Google Over Three Years,” *The Wall Street Journal*, May 8, 2023, <https://www.wsj.com/articles/new-york-times-to-get-around-100-million-from-google-over-three-years-f2dd15e1>.

respective deals with Google in Australia, each worth around AU\$30 million a year (around US\$19 million).⁷⁸ Around the same time, News Corp also announced a three-year deal with Google worth over \$100 million a year.⁷⁹ This deal included both the News Corp’s Australian publications such as *The Australian* and *The Daily Telegraph*, as well as their other publications around the world such as *The Times* of London, *New York Post*, and others.⁸⁰ Another, much smaller and youth-focused publisher in Australia, Junkee Media, also struck a payment deal with Google that was reportedly worth around AU\$1 million a year (about US\$750,000 in 2021).⁸¹ *The Guardian* negotiated a deal with Google reportedly worth more than US\$3.7 million a year in Australia, and more than US\$6.1 million a year in the United Kingdom.⁸² The ABC, Australia’s publicly owned broadcaster, is reported to have struck a deal worth around US\$22 million per year in 2021.⁸³

Many other publishers in Australia were reported to have made partnership deals with Google, including Schwartz Media, *The New Daily*, Australian Community Media, The Conversation, Country Press Australia, Ten, Times News Group, Crikey, Solstice Media, and others. Country

⁷⁸ John Kehoe and Miranda Ward, “More Media Deals to Follow Google-Seven Agreement,” *The Australian Financial Review*, February 15, 2021, <https://www.afr.com/companies/media-and-marketing/google-strikes-news-showcase-deal-with-seven-20210215-p572jc>. Miranda Ward, “News Corp signs Partnership Deal with Google,” *The Australian Financial Review*, February 18, 2021, <https://www.afr.com/companies/media-and-marketing/news-corp-signs-news-partnership-deal-with-google-20210218-p573ja>.

⁷⁹ <https://www.theaustralian.com.au/business/media/news-corp-signs-historic-deal-with-google/news-story/b381cead7d3b5e4adc620a759b19690e>. [format cite]

⁸⁰ Miranda Ward, “News Corp signs Partnership Deal with Google,” *The Australian Financial Review*, February 18, 2021, <https://www.afr.com/companies/media-and-marketing/news-corp-signs-news-partnership-deal-with-google-20210218-p573ja>. “News Corp and Google Agree to Global Partnership on News,” *News Corp*, February 17, 2023, <https://newscorp.com/2021/02/17/news-corp-and-google-agree-to-global-partnership-on-news/>.

⁸¹ Lisa Visentin and Zoe Samios, “‘Historic Moment’: Treasurer Josh Frydenberg Hails Google’s News Content Deals,” *The Sydney Morning Herald*, February 17, 2021, <https://www.smh.com.au/business/companies/historic-moment-treasurer-josh-frydenberg-hails-google-s-news-content-deals-20210217-p573eu.html>.

⁸² Dominic Ponsford, “Guardian Takes Google Cash and Signs up to News Showcase in the UK,” *The Press Gazette*, July 5, 2022, <https://pressgazette.co.uk/news/guardian-google-news-showcase/>.

⁸³ See, William Turvill, “Google News Showcase: Publishers Break Silence over Secret Deals Behind \$1bn Scheme,” *The Press Gazette*, September 30, 2022, <https://pressgazette.co.uk/news/google-news-showcase/>. See also, Amanda Meade, “ABC Does Deals with Google and Facebook that Could See Millions Spent on Regional News,” *The Guardian*, May 26, 2021, <https://www.theguardian.com/media/2021/may/26/abc-does-deals-with-google-and-facebook-that-could-see-millions-spent-on-regional-news>

Press Australia, assisted by attorney Emma McDonald, from the Minderoo Foundation, helped the smaller news outlets [band together](#) in negotiations with Google.⁸⁴

In the UK, JPI Media, the publisher of *The Scotsman*, *The Yorkshire Post* and others, has reportedly disclosed that it earned £100,000 a month, or £1.2 million a year (about US\$1.65 million in 2021), from deals with Google and Facebook.⁸⁵ It was also reported that Reach – the UK’s largest regional newspaper owner behind national UK publications such as the *Daily Mirror* – earns between £1 million and £1.5 million a year from Google (or between US\$1.4 – 2 million in 2021).⁸⁶

In February 2021, Google launched its News Showcase in the UK, with an estimated budget of around £30 million a year,⁸⁷ and noted that it had signed partnerships with a number of publishers “such as Archant, DC Thomson, *Evening Standard*, *The Financial Times*, Iliffe Media, *The Independent*, Midland News Association, *New Statesman*, Newsquest, JPI Media, Reach, Telegraph Media, and Reuters.”⁸⁸ This agreement means that more than 120 publications in the UK are slated to curate content for News Showcase.⁸⁹

Relatedly, in 2021, Google reportedly signed a US\$76 million with a group of French publishers.⁹⁰ According to the reports, the terms of the deal stipulated that Google would pay US\$22 million per year for three years to a group of 121 national and local French news publications after signing individual licensing agreements with each. In addition, Google reportedly agreed to pay US\$10 million to these publishers for their commitment not to sue

⁸⁴ “Review of the News Media and Digital Platforms Mandatory Bargaining Code,” *Country Press Australia*, May 6, 2022, <https://treasury.gov.au/sites/default/files/2023-02/c2022-264356-cpa.pdf>.

⁸⁵ William Turvill, “Google News Showcase: Publishers Break Silence Over Secret Deals Behind \$1bn Scheme,” *The Press Gazette*, September 30, 2022, <https://pressgazette.co.uk/news/google-news-showcase/>.

⁸⁶ William Turvill, “Google News Showcase: Publishers Break Silence Over Secret Deals Behind \$1bn Scheme,” *The Press Gazette*, September 30, 2022, <https://pressgazette.co.uk/news/google-news-showcase/>.

⁸⁷ William Turvill, “Google News Showcase: Publishers Break Silence Over Secret Deals Behind \$1bn Scheme,” *The Press Gazette*, September 30, 2022, <https://pressgazette.co.uk/news/google-news-showcase/>.

⁸⁸ Ronan Harris, “Google News Showcase is Launching in the U.K.,” *The Keyword, Google*, February 10, 2021, <https://blog.google/products/news/google-news-showcase-launches-uk/>.

⁸⁹ Ronan Harris, “Google News Showcase is Launching in the U.K.,” *The Keyword, Google*, February 10, 2021, <https://blog.google/products/news/google-news-showcase-launches-uk/>.

⁹⁰ Mathieu Rosemain, “Exclusive: Google’s \$76 million deal with French publishers leaves many outlets infuriated,” *Reuters*, February 12, 2021, <https://www.reuters.com/article/us-google-france-copyright-exclusive/exclusive-googles-76-million-deal-with-french-publishers-leaves-many-outlets-infuriated-idUSKBN2AC27N>.

over copyright claims for three years.⁹¹ It was also reported that the smallest publications were to be paid around US\$14,000 per year, while the largest ones were to receive up to US\$1.3 million a year.⁹² The three national French titles – *Le Monde*, *Le Figaro*, and *Liberation* – had also separately negotiated deals agreeing also to sell subscriptions through Google, which would pay them around US\$3.6 million a year each, in addition to other deals.⁹³

In exchange for its publication of news content affiliated with *Corint Media*, an umbrella organization that represents the German and international publishers including Sat.1, ProSieben, RTL, Axel Springer and CNBC in Germany, Google agreed to pay a total of \$8.65 million for the period from June 7, 2021 and until the end of 2023, and \$3.38 million annually thereafter under an interim agreement, pending a final decision from the German patent office.⁹⁴

Google has also given publishers the ability to commit to an upcoming product called Google News Showcase, which would allow publishers to curate content and provide Google users with limited access to paywalled stories for free. It is important to note that Google News Showcase typically pays publishers for content appearing within the Showcase platform, ***but not stories appearing in search results***. Thus, **these deals do not capture the full value of publisher's content to Google. Showcase redirects traffic to digital news publishers' websites and allows publishers to monetize readers through both advertising and subscriptions. But as a licensing fee, the payments made are significantly less than a fair licensing fee that reflects the value that these publishers generate for Google on the Google Search platform.**

⁹¹ Mathieu Rosemain, "Exclusive: Google's \$76 million deal with French publishers leaves many outlets infuriated," *Reuters*, February 12, 2021, <https://www.reuters.com/article/us-google-france-copyright-exclusive/exclusive-googles-76-million-deal-with-french-publishers-leaves-many-outlets-infuriated-idUSKBN2AC27N>.

⁹² Mathieu Rosemain, "Exclusive: Google's \$76 million deal with French publishers leaves many outlets infuriated," *Reuters*, February 12, 2021, <https://www.reuters.com/article/us-google-france-copyright-exclusive/exclusive-googles-76-million-deal-with-french-publishers-leaves-many-outlets-infuriated-idUSKBN2AC27N>.

⁹³ Mathieu Rosemain, "Exclusive: Google's \$76 million deal with French publishers leaves many outlets infuriated," *Reuters*, February 12, 2021, <https://www.reuters.com/article/us-google-france-copyright-exclusive/exclusive-googles-76-million-deal-with-french-publishers-leaves-many-outlets-infuriated-idUSKBN2AC27N>.

⁹⁴ "Corint Media reaches interim agreement with Google on payment / Final remuneration determined by Arbitration Board," Corint Media Press Release, October 12, 2023, <https://www.corint-media.com/en/interim-agreement-with-google-on-payment-final-remuneration-determined-by-arbitration-board/>.

Meta (Facebook) Deals with Publishers

According to one report, in 2019, Facebook had negotiated and spent around US\$105 million on a number of three-year deals with publishers in the US, and around US\$90 million on news video content.⁹⁵ The full details of these partnerships — some of which also unlocked paywalled content — were not publicly disclosed. However, the report states that Facebook spent more than US\$10 million on its news partnership with *The Wall Street Journal*, more than US\$3 million on its partnership with CNN, and upwards of US\$20 million on its partnership with *The New York Times*.⁹⁶

Market Analyst Reports

Two JP Morgan market reports, published in 2021, analyzed the impact of Google News Showcase on Australian publishers and their media revenues.⁹⁷ These reports provide case studies from Europe and apply a similar framework to local publishers in Australia. Based on analysis of data from Europe, they estimate a total combined cash flow from Google and Facebook in Australia to publishers to be as high as US\$160 million per year.⁹⁸

These reports also estimate that in France, for example Google used 4.1 percent of its local gross revenue (or somewhere around 21 percent of its relevant local search ad revenue) to pay news publishers.⁹⁹

Assuming that 5 percent of total advertising revenues be paid to Australian news publishers, JP Morgan analysts say that could mean payments of AU\$215 million from Google and AU\$35 million from Facebook to the publishers. Considering that search ad revenue makes up close to

⁹⁵ Sara Fischer, “Scoop: Meta Officially Cuts Funding for U.S. News Publishers,” *Axios*, July 28, 2022, <https://www.axios.com/2022/07/28/meta-publishers-news-funding-cut>

⁹⁶ Sara Fischer, “Scoop: Meta Officially Cuts Funding for U.S. News Publishers,” *Axios*, July 28, 2022, <https://www.axios.com/2022/07/28/meta-publishers-news-funding-cut>

⁹⁷ See, Don Carducci and Abhinay Jeggannagari, “Nine Entertainment: Nine Scores a Try with Stan Sports - Worthy of another upgrade,” *J.P. Morgan*, February 24, 2021. See also, Don Carducci and Abhinay Jeggannagari, “Australian Media Sector: Upgrade cycle: started from the bottom now we’re here,” *J.P. Morgan*, May 03, 2021.

⁹⁸ As mentioned earlier, former chair of Australia’s Competition Commission, Rod Sims, has estimated the annual value to publishers to be about AUS \$200 million or around US\$150 million.

⁹⁹ Based on public filings and eMarketer estimates, we can infer that search ad revenue makes up somewhere between 40 and 60 percent of Google’s total revenue.

60 percent of Google’s total advertising revenues, this amount roughly corresponds to somewhere around 41 percent Google’s and Facebook’s relevant local ad revenue.¹⁰⁰

Historical benchmarks within news media

While the payments from Google and Meta to publishers are relatively small, other studies of news media indicate that royalty-sharing agreements tend to involve a 40–50 percent split between parties. Our calculations are based on a 50 percent split, which is benchmarked to a set of examples of publicly available revenue-sharing agreements between news publishers and licensees.

¹⁰⁰ According to public filings and eMarketer analysis, we can estimate search ad revenue share of total advertising revenues to range between 56 and 61 percent.

After examining these agreements more closely, certain patterns emerge. First, several of these licenses are non-exclusive and allow the licensee to use and distribute content on their platforms. Second, as illustrated in Figure 11, even when exclusive licenses exist, the agreements provide for substantially higher publisher revenue shares than current publisher agreements with Google and Facebook do – typically in the range of 40–50 percent of revenues. Third, although our sample contains only six agreements, these patterns appear to have remained remarkably stable over the course of a decade, and support our use of a 50-50 revenue sharing split when estimating payments to publishers for their news content.

Finding Applicable Revenue Sharing Benchmarks

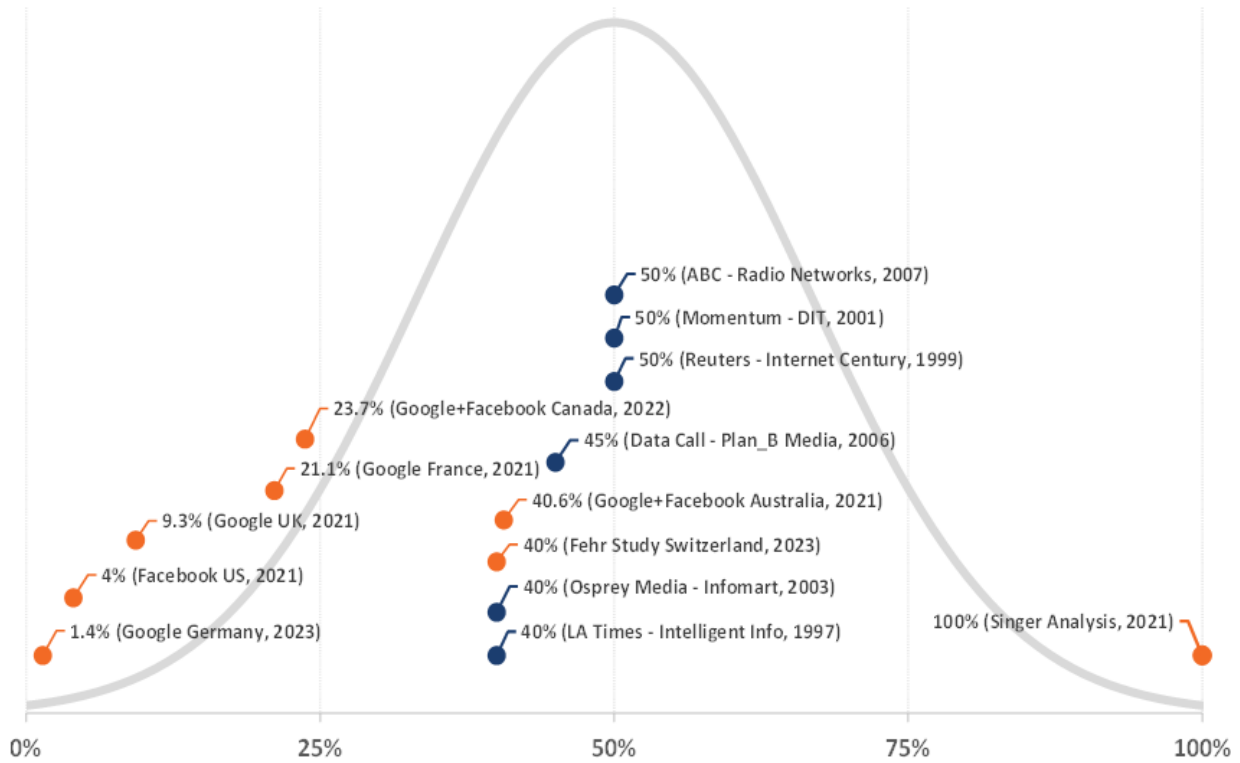
To find relevant revenue split benchmarks, we search RoyaltyStat, a database of royalty fees and over 20,000 fully searchable license agreements compiled from unredacted SEC filings and other public sources.

We search the database for all agreements where intangible assets involved are defined as “news,” and the agreement text contains the word “content.” This search results in 48 agreements. These agreements comprise a mix of deals involving different geographies, related (e.g. subsidiaries of the same company) and unrelated parties, and a mix of different royalty calculation methodologies—from per-unit and per-copy fixed fees to revenue and profit sharing agreements. For this particular analysis, we eliminate from consideration agreements between related parties (since they typically do not reflect market rates), those involving per-unit fixed royalty payments (since they cannot readily be converted to revenue splits), and those not including the US and its territories (since the US is our geography of interest). We also eliminate from consideration all agreements that do not involve news content distribution.

This leaves us with six benchmark agreements made between 1997 and 2007. These agreements are listed in Table 3.

It is important to note that, although no content licensing agreement is typically *exactly the same* as any other licensing agreement, analyzing those agreements that are similar (or comparable) across a set of key economic dimensions provides researchers with an insight into how revenue would likely be shared.

FIGURE 11: DISTRIBUTION OF RELEVANT CONTENT PROVIDERS REVENUE SHARES



	Minimum	Median	Average	Maximum
Historical Benchmarks	40%	47.5%	45.8%	50%
Reported Payments and Analyses	1.4%	22.4%	30%	100%

Notes: Data points in blue represent revenue share due to publishers from historical content distribution agreements listed in Table 3. The licensor/content provider and licensee/distributor names are listed in the parentheses, together with the year of the agreement (e.g., Reuters – Internet Century refers to an agreement where Reuters was the licensor/content provider and Internet Century the licensee/distributor). Data points in orange represent share of relevant revenue due to publishers from both existing, documented deals that Google and Facebook have signed with news publishers in specified countries, and other economic reports and/or analyses that we reviewed. Percentages indicate the share of relevant revenue due to content providers.

TABLE 3: HISTORICAL CONTENT DISTRIBUTION AGREEMENTS

Year	Licensor (Publisher)	Licensee (Distributor)	Licensor Royalty	Type	Description
1997	LA Times	Intelligent Information, Inc.	40% of gross revenues from any service using or including LA Times content	Content Distribution Agreement	Non-exclusive license to distribute and market the LA Times news content bundled with information such as weather, traffic and sports, for delivery through wireless public networks including paging, PCS, mobile radio and cellular.
1999	Reuters	Internet Century, Inc.	50% of net advertising revenue from any page that contains any Reuters content	Content Distribution Agreement	Non-exclusive license to distribute Reuters Online Spanish Report comprising a selection of top stories, including general news, business, and sports. In addition to royalty payments, the Distributor is required to make monthly service payments to Reuters in order to access the content.
2001	Momentum Internet Corp.	DIT Ventures, Inc.	50% of advertising revenue	Content License Agreement	Non-exclusive license to market and distribute via the Internet or any wireless device Stock Market News, Sector Analysis, Stock Reports, and Hot Stocks from Quote123 website.
2003	Osprey Media Group	Infomart Ltd.	40% of revenues attributable to the licensed content	Electronic Distribution Agreement	Exclusive license to offer and sublicense news, editorial materials and photographs contained in licensor's publications for use with digital information storage and retrieval products and services, including receiving, reproducing, re-marketing, displaying and distributing content, making storage copies of portions it, and granting subscribers the right to search, display, copy and download the content.
2006	Data Call Technologies, Inc.	Plan_B Media AG	45% of net revenues	Content Distribution Agreement	License to market and distribute news, business, science and entertainment headlines, and sports, financial and weather content on licensee's mobile device platform.
2007	American Broadcasting Companies, Inc. ("ABC")	Radio Networks, LLC	50% of net sales	Production/Distribution Agreement	Exclusive license to promote, market and distribute the English-language, audio news service produced by or on behalf of ABC to terrestrial radio stations. In addition to royalty payments, the Distributor is required to make annual license fee payments of \$7 million to ABC.

Conclusion

Ours is the first public paper to calculate a realistic estimate of what Google and Meta owe US publishers for the use of their news content, and to elucidate the methodology we have used to do so. Although we exclusively rely on publicly accessible information, some of the data were obtained through paid services that gather and aggregate public data and charge a subscription fee.¹⁰¹ News publishers who would like to rely on this report should be able to use our methodology to calculate what they believe they are owed. First, they can use the data on audience use of news from Fehr and Allcott et al. studies. Then, they can find data on (or otherwise estimate) the size of the advertisement market for platforms in their respective countries. With data on platform use and the size of advertisement revenues, they can then calculate the share of revenue coming from news content. Finally, they can decide what the appropriate revenue split in order to determine the payments they are ultimately owed.

Many avenues are open for future research. The Fehr Study methodology can be extended across different countries to carry out studies of user behavior and to ascertain the importance of news to social media usage. However, regional differences may be important, so future research will help delineate the characteristics of particular markets.

The political economy implications of the underfunding of news by digital platforms are tremendous, and we have proposed global principles for platform remuneration to publishers elsewhere. If Google and Facebook were to make traffic and search data public, economists would be able to assess user behavior more accurately and better gauge what is owed to news publishers. However, even without these proprietary data, significant information that resides within the public domain can and should be used to shed light on the economic forces at play.

The decades of underpayment from platforms to news publishers have helped boost profits for Google and Facebook and increase their respective market (and monopoly) power.¹⁰² Their dominant market positions have had significant (negative) welfare effects. The market power

¹⁰¹ More specifically, this includes content distribution agreements and advertising revenues.

¹⁰² See, e.g., “Justice Department Sues Google for Monopolizing Digital Advertising Technologies,” US Department of Justice press release, January 24, 2023, <https://www.justice.gov/opa/pr/justice-department-sues-google-monopolizing-digital-advertising-technologies>.

also means that many governments have become fearful of regulating big tech companies.¹⁰³ An important component of the problem has been a somewhat myopic focus on only a subset of services offered by the platforms. For example, news content is part of the core of the Google search experience, and focusing on specific products such as Google Showcase or Google News leads to payment numbers far less than appropriate.

According to our analysis, the payments to publishers have been well below accepted industry norms thus far, and there is considerable room for improvement in this regard. Whether this will happen directly as a result of new legislation or as a result of equitable bargaining outcomes between publishers and platforms remains to be seen. There have been calls for future agreements to be transparent, include smaller publishers, and promote investment that will continue to support news gathering and publication in the digital age.¹⁰⁴

We find overwhelming evidence that the value of news is being appropriated by Google and Meta in excess of long-standing norms of how jointly created surplus value should be shared. There is a compelling case for a better division of revenue and this paper provides a framework of analysis for such a model.

¹⁰³ See, Alexis Wichowski (2020), *The Information Trade: How Big Tech Conquers Countries, Challenges Our Rights and Transforms Our World*, HarperOne. See also, Anu Bradford (2023), *Digital Empires*, Oxford University Press.

¹⁰⁴ Anya Schiffrin and Courtney Radsch, “News publishers declare global principles for bargaining with Big Tech,” *Poynter*, July 26, 2023, <https://www.poynter.org/commentary/analysis/2023/news-publishers-declare-global-principles-for-bargaining-meta-google/>.