

**IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION**

**IN RE GOOGLE PLAY DEVELOPER
ANTITRUST LITIGATION**

Case No. 3:20-cv-05792-JD

DECLARATION OF MICHAEL A. WILLIAMS, PH.D.

June 30, 2022

INTRODUCTION

1. My name is Michael A. Williams. I am a managing director at Berkeley Research Group LLC, headquartered at 2200 Powell Street, Suite 1200, Emeryville, CA 94608.

2. I previously prepared two expert reports on behalf of the developer plaintiffs (“Plaintiffs”) in this matter.¹ I understand from counsel for Plaintiffs (“Plaintiffs’ Counsel”) that a class has been defined (hereinafter the “Settlement Class”) as follows:

3. All former or current U.S. Developers that meet each of the following criteria: (a) sold an application or in-app product (including subscriptions) for a non-zero price between August 17, 2016 and December 31, 2021; (b) paid Google a service fee greater than 15% on at least one such transaction between August 17, 2016 and December 31, 2021; and (c) earned proceeds between U.S. \$0 and U.S. \$2,000,000.00 through Google Play in every calendar year between and inclusive of 2016 and 2021.² Solely for Settlement Class definition purposes, the 2016 calendar year shall consist of August 17, 2016 through December 31, 2016. Plaintiffs’ Counsel has asked me to supplement my previous work to estimate damages for the Settlement Class. Plaintiffs’ Counsel has also asked me to estimate the savings from Google’s 15% service fee tier Program³ to the members of this Settlement Class, for the period July 1, 2021 through May 25, 2025.

4. My primary conclusions are summarized as follows.

- a. The Settlement Class includes 47,972 developers, which constitutes 99.4% of all developers encompassed by the class definition set forth in Plaintiffs’ January 24, 2022 Second Amended Consolidated Class Action Complaint.⁴
- b. Based on the analysis I presented in my previous expert reports, I estimate damages to the Settlement Class to be between \$236 million to \$248 million.⁵

¹ Expert Report of Michael A. Williams, Ph.D. (February 28, 2022) (hereinafter “Williams Expert Report” or “Opening Report”); Expert Reply Report of Michael A. Williams, Ph.D. (April 25, 2022) (hereinafter “Williams Expert Reply Report” or “Reply Report”). My resume, which contains more information on my background and qualifications, is attached to this Declaration as Appendix I.

² For purposes of the Settlement Class definition, I treat any negative proceeds for a developer in a calendar year as \$0 proceeds.

³ Under this Program, developers pay a 15% service fee on their first \$1 million in earnings in a calendar year on apps and in-app products sold through the Google Play store. See <https://support.google.com/googleplay/android-developer/answer/10632485>.

⁴ The Second Amended Consolidated Class Action Complaint, at ¶ 244, defined the class as follows: “All U.S. persons or entities that paid Google a ‘service fee’ of greater than 15% on any paid Android OS app or paid in-app content (including subscriptions) sold in or via the Google Play store, in or via any U.S. or foreign Google Play storefront.” Google does not have a service fee tier between 15% and 30%. Accordingly, the foregoing class definition’s reference to a service fee “greater than 15%” is, as a practical matter, a reference to Google’s 30% service fee tier.

⁵ My damages calculation for the Settlement Class is also conservative because it does not include any damages for Settlement Class Members who paid a service fee greater than 15% on some transactions, but by virtue of a promotion or cancellation, refunded the transaction amount. In certain scenarios, these Settlement Class Members would have been better off if Google had charged lower service fees, but conservatively, I have not estimated those damages.

- c. I estimate the total available savings to developers resulting from the 15% service fee tier Program for the period July 1, 2021 through May 25, 2025 to be \$109.8 million for the Settlement Class. Enrollment in the 15% service fee tier Program is optional. Using current enrollment rates, I estimate the total redeemed savings to Settlement Class members for the period July 1, 2021 through May 25, 2025 to be \$39.4 million.

NUMBER AND SHARE OF SETTLEMENT CLASS MEMBERS

5. I identify a developer as a member of the Settlement Class if the developer meets all of the following criteria:

- a. The developer is an U.S. developer.⁶
- b. The developer made an Android app or in-app item (including a subscription, hereinafter “IAP”) transaction via Google Play Store at a service fee greater than 15% at least once during the Class Period.⁷
- c. The developer never earned more than \$2 million in total proceeds⁸ on the Google Play Store in any calendar year from 2016 to 2021.⁹

6. Applying this methodology to Google’s monthly app revenue data, I found that there are 47,972 members of the Settlement Class. There are 275 U.S. developers who sold an Android app or IAP via Google Play Store at a service fee greater than 15% during the class period but are not part of the Settlement Class because they received more than \$2 million in proceeds through the Google Play Store in at least one year from 2016 to 2021. Thus, 99.4% of U.S. developers who ever sold an Android app or IAP at a service fee greater than 15% during the class period are in the Settlement Class.

7. The Settlement Class also includes the class representatives Pure Sweat Basketball, Inc. (“Pure Sweat Basketball”), Peekya App Services, Inc. (“Peekya”), Scalisco LLC d/b/a Rescue Pets (“Scalisco”), and LittleHoots, LLC (“LittleHoots”) per the criteria above. All four class representatives are U.S. developers and have sold at least one Android app or IAP via Google Play

⁶ I understand that the term “developer” in the Class definition is the person or entity holding the Google-issued developer ID number associated with a given sale of app or in-app content. I understand the developer ID number appears in Google’s monthly app revenue data in the field “app_developer_gaia_id.” I also understand that a developer is defined as an U.S. developer if the field “app_developer_country” in the monthly app revenue data contains the value “US.” Google’s monthly app revenue data for U.S. developers consists of GOOG-PLAY-005535885, GOOG-PLAY-010801689.

⁷ I also understand from counsel for Plaintiffs that the “Class Period” for purposes of the settlement is defined as August 17, 2016 through December 31, 2021. Service fee is calculated as the ratio of initial Google revenue (iusd_original_revenue) over initial consumer spend (iusd_original_consumer_spend). Revenues are calculated based on final Google revenue (iusd_final_revenue).

Rounding differences exist (e.g., suppose an app was purchased for \$0.99, and the service fee equaled \$0.15, then the resulting service fee would equal 15.2%). I define the 15% service fee to include service fees greater than or equal to 14.5% and smaller than 15.5% in the data.

⁸ “Proceeds” refers to a developer’s net revenues, after subtracting out any service fee paid to Google.

⁹ For these purposes, the calendar year 2016 is defined to consist of August 17, 2016 through December 31, 2016.

Store at a service fee greater than 15% while earning less than \$2 million in total proceeds in every calendar year. Accordingly, all four class representatives are in the Settlement Class.

DAMAGES FOR THE SETTLEMENT CLASS

8. In my Opening Report, I estimated the damages caused by Google's alleged conduct as equal to (1) the difference between Google's actual service fee for the Settlement Class (which by definition is greater than 15%) and the but-for service fee multiplied by (2) the relevant volume of commerce.¹⁰

9. As discussed in my Opening Report, I employed two alternative damages methodologies in estimating but-for service fees and the corresponding damages for developers.

10. *Economic Profit Rates Method.* First, I used an economic profits methodology. Kevin Kreitzman and I specified a set of criteria that, when applied, identified a set of comparable firms operating in two-sided markets that maintain transaction platforms that facilitate trades between willing buyers and sellers.¹¹ I used these comparable firms to create a yardstick or benchmark with which to calculate damages. In his expert report, Mr. Kreitzman calculated the economic profits and economic profit rates of these firms. He also calculated the economic profits and economic profit rates generated by the Google Play store. Based on instructions that I provided, he then calculated the service fees that Google would have charged to obtain the weighted-average economic profit rate of the yardstick firms. Using this but-for service fee of 15.69%, I calculated proposed Class members' damages.

11. *Google's Actual Service Fees Method.* Second, in certain instances, Google has offered service fees at or below 15% to the limited number of developers who can compete with Google by relying on non-Google payment solution services for sales of their in-app products, either through their own websites or through third-party IAP transaction services. These isolated examples demonstrate that Google has had to reduce its service fees in certain limited instances when it faced competition. Although the common economic evidence would support a but-for service fee below 15%—because Google has offered less than 15% in the actual world—I concluded in my Opening Report that 15% is an appropriate and conservative yardstick.

12. Table 1 shows the but-for services fees and damages based on these two methodologies.¹² As shown in the table, damages to the Settlement Class range between \$236 million to \$248 million.

¹⁰ The relevant volume of commerce is the total app sales made by Settlement Class Members in the Class Period at a service fee of greater than 15%.

¹¹ See Expert Report of Kevin Kreitzman (February 28, 2022) (hereinafter "Kreitzman Expert Report") and Expert Reply Report of Kevin Kreitzman (April 25, 2022) (hereinafter "Kreitzman Expert Reply Report") for more details of Mr. Kreitzman's analysis discussed in this section.

¹² As explained in Mr. Kreitzman's expert reports, Google Play Store also earns revenues from advertisements. As shown in Mr. Kreitzman's expert report, if Google Play's ad revenue is included in his economic profit calculations, then estimated but-for service fees would be lower (and corresponding damages would be higher). In this declaration, I have not included Google's ad revenues in calculating Google's damages.

TABLE 1
ESTIMATED BUT-FOR SERVICE FEES AND DAMAGES FOR SETTLEMENT CLASS MEMBERS
AUGUST 17, 2016 – DECEMBER 31, 2021
(REVENUES AND DAMAGES IN MILLION DOLLARS)

Estimation Method	Total Actual Google Revenue (\$)	Actual Service Fee	Total But-for Google Revenue (\$)	But-for Service Fee	Damages (\$)
Economic Profit Rates	495	30.0%	259	15.69%	236
Google's Actual Service Fees	495	30.0%	248	15.00%	248

SAVINGS FROM THE 15% SERVICE FEE TIER PROGRAM

13. On July 1, 2021, Google implemented the 15% service fee tier Program that reduced its service fees to 15% for developers' first \$1 million in annual revenues.¹³ Specifically, the service fee is equivalent to:¹⁴

- For developers who are enrolled in the 15% service fee tier, and no other Google program offering service fees below 30%, the service fee is:
 - ◆ 15% for the first \$1M (USD) of earnings each year,
 - ◆ 30% for earnings in excess of \$1M (USD) each year.
- For developers who are not enrolled in the 15% service fee tier, and no other Google program offering service fees below 30%, the service fee is 30%.

14. Plaintiffs' Counsel has also asked me to estimate both total available savings and total redeemed savings from this program to the members of the Settlement Class for the period July 1, 2021 through May 25, 2025 ("Savings Period"). Total available savings refer to savings Settlement Class Members could obtain if all of them enroll in the 15% service fee tier Program for the entire Savings Period. Total redeemed savings refer to estimated total savings from Settlement Class Members that enrolled in the 15% service fee tier Program in the Savings Period.

15. The last year available in Google's monthly app revenue data is 2021. In estimating savings in 2022-2025, I assume that each developer generates the same monthly app sales in 2022-2025.¹⁵ For example, January 2022, January 2023, January 2024, and January 2025 app sales are assumed to be the same as January 2021 app sales. Given that app sales have been increasing over time since the inception of Google Play store, I likely underestimated app sales in 2022-2025.

¹³ See <https://support.google.com/googleplay/android-developer/answer/10632485>.

¹⁴ See <https://support.google.com/googleplay/android-developer/answer/112622?hl=en>

¹⁵ In this declaration, I use app sales to refer to the collection of (1) sales of paid apps, (2) sales of in-app purchase items, and (3) subscription payments.

16. To calculate total available savings for the Settlement Class, I exclude transactions that would otherwise receive 15% service fee in the absence of the 15% service fee tier Program.¹⁶

17. For the period July 1, 2021 through May 25, 2025, the 15% for the 15% service fee tier Program yields total *available savings* of **\$109.8 million** to the Settlement Class.

18. In the six-month period immediately following July 2021, developers began to transition from paying the default 30% service fee to the new default 15% service fee for the first \$1 million of their annual revenues. Enrollment is optional. Based on the current participation rate, and making the conservative assumption that participation does not increase, the 15% service fee tier Program yields total *redeemed savings* of **\$39.4 million** to the Settlement Class.

¹⁶ In 2021, some subscription payments may be at a service fee greater than 15% because the consumer subscribed for less than one year. However, I conservatively assume that all subscription revenues in 2021 were at 15% and do not generate savings from the 15% service fee tier Program.

June 30, 2022

Michael A. Williams

Michael A. Williams

APPENDIX I: RESUME

MICHAEL A. WILLIAMS

I am a Managing Director at Berkeley Research Group, LLC. I specialize in analyses involving competition, antitrust, industrial organization, and regulation. I have published articles in a number of academic journals, including the *Proceedings of the National Academy of Sciences*, *Science Advances*, *American Economic Review*, *Journal of Industrial Economics*, *International Journal of Industrial Organization*, *Journal of Law and Economics*, *American Law and Economics Review*, *Journal of Economics & Management Strategy*, *Review of Industrial Organization*, *Journal of Institutional and Theoretical Economics*, *Economics Letters*, *Journal of Public Economic Theory*, *Behavioral Science*, *Antitrust Bulletin*, *Physica A*, *Texas Law Review*, and *Yale Journal on Regulation*.

I have provided written and/or oral testimony before:

- United States District Court, Middle District of Alabama
- United States District Court, Western District of Arkansas
- United States District Court, Central, Northern, and Southern Districts of California
- United States District Court, District of Delaware
- United States District Court, Middle District of Florida
- United States District Court, Northern District of Georgia
- United States District Court, Eastern Division, District of Idaho
- United States District Court, Northern and Southern Districts of Illinois
- United States District Court, District of Kansas
- United States District Court, District of Massachusetts
- United States District Court, Eastern District of Michigan, Southern Division
- United States District Court, District of Minnesota
- United States District Court, District of New Jersey
- United States District Court, Eastern and Southern Districts of New York
- United States District Court, Eastern District of Pennsylvania
- United States District Court, Eastern District of Tennessee

- United States District Court, Northern and Southern Districts of Texas
- United States District Court, District of Utah
- United States District Court, Eastern District of Virginia
- United States Court of Federal Claims
- State of Connecticut, Superior Court
- State of New Mexico, Second Judicial District
- State of Nevada, Gaming Commission and State Gaming Control Board
- Public utilities commissions: Arkansas, Hawaii, Michigan, Minnesota, Missouri, Nebraska, New Mexico, Texas, and Washington
- The Netherlands, Amsterdam District Court

I have been retained as an economic consultant by the U.S. Department of Justice, Antitrust Division, the U.S. Federal Trade Commission, and the Canadian Competition Bureau.

Previously, I was an economist with the U.S. Department of Justice, Antitrust Division. I hold a B.A. degree in economics from the University of California, Santa Barbara, and I received my M.A. and Ph.D. degrees in economics from the University of Chicago.

TESTIMONY AND EXPERT REPORTS (PAST FOUR YEARS)

UNITED STATES DISTRICT COURT, DISTRICT OF MINNESOTA
In Re Pork Antitrust Litigation.

UNITED STATES DISTRICT COURT, NORTHERN DISTRICT OF CALIFORNIA
In Re Google Play Developer Antitrust Litigation.

UNITED STATES DISTRICT COURT, NORTHERN DISTRICT OF ILLINOIS
In Re Broiler Chicken Antitrust Litigation.

UNITED STATES DISTRICT COURT, EASTERN DISTRICT OF MICHIGAN
In Re: FCA US LLC Monostable Electronic Gearshift Litigation.

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UNITED STATES DISTRICT COURT, EASTERN DISTRICT OF VIRGINIA
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UNITED STATES DISTRICT COURT, SOUTHERN DISTRICT OF CALIFORNIA
Richard Bartlett et al. v. BP West Coast Products, LLC et al. (employed by Competition Economics, LLC).

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In Re: Apple Inc. Device Performance Litigation.

UNITED STATES DISTRICT COURT, MIDDLE DISTRICT OF FLORIDA
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In Re: Payment Card Interchange Fee and Merchant Discount Antitrust Litigation.

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Unilever et al./Smurfit Kappa, DS Smith et al. (Cardboard).

UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS
In Re: Dealer Management Systems Antitrust Litigation.

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF UTAH
Union Pacific Railroad Co. v. Utah State Tax Commission, et al.

UNITED STATES DISTRICT COURT, NORTHERN DISTRICT OF CALIFORNIA
In Re: Capacitors Antitrust Litigation.

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UNITED STATES DISTRICT COURT, CENTRAL DISTRICT OF CALIFORNIA
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