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approval, by the Commission, has been placed on the public record for a period of thirty (30) days. The following Analysis to Aid Public Comment describes the terms of the consent agreement, and the allegations in the complaint. An electronic copy of the full text of the consent agreement package can be obtained from the FTC Home Page (for January 15, 2014), on the World Wide Web, at :// . . / / . . A paper copy can be obtained from the FTC Public Reference Room, Room 130–H, 600 Pennsylvania Avenue NW, Washington, DC 20580, either in person or by calling (202) 326–2222.

You can file a comment online or on paper. For the Commission to consider your comment, we must receive it on or before February 14, 2014. Write ‘‘Apple Inc.—Consent Agreement; File No. 112 3108’’ on your comment. Your comment—including your name and your state—will be placed on the public record of this proceeding, including, to the extent practicable, on the public Commission Web site, at :// . . / / . . As a matter of discretion, the Commission tries to remove individuals' home contact information from comments before placing them on the Commission Web site.

Because your comment will be made public, you are solely responsible for making sure that your comment does not include any sensitive personal information, like anyone's Social Security number, date of birth, driver's license number or other state identification number or foreign country equivalent, passport number, financial account number, or credit or debit card number. You are also solely responsible for making sure that your comment does not include any sensitive health information, like medical records or other individually identifiable health information. In addition, do not include any ‘‘[t]rade secret or any commercial or financial information which . . . is privileged or confidential,’’ as discussed in Section 6(f) of the FTC Act, 15 U.S.C. 46(f), and FTC Rule 4.10(a)(2), 16 CFR 4.10(a)(2). In particular, do not include competitively sensitive information such as costs, sales statistics, inventories, formulas, patterns, devices, manufacturing processes, or customer names.

If you want the Commission to give your comment confidential treatment, you must file it in paper form, with a request for confidential treatment, and you have to follow the procedure explained in FTC Rule 4.9(c), 16 CFR 4.9(c).[1] Your comment will be kept confidential only if the FTC General Counsel, in his or her sole discretion, grants your request in accordance with the law and the public interest.

Postal mail addressed to the Commission is subject to delay due to heightened security screening. As a result, we encourage you to submit your comments online. To make sure that the Commission considers your online comment, you must file it at :// . . / / by following the instructions on the web-based form. If this Notice appears at :// . . /#! , you also

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[1] In particular, the written request for confidential treatment that accompanies the comment must include the factual and legal basis for the request, and must identify the specific portions of the comment to be withheld from the public record. FTC Rule 4.9(c), 16 CFR 4.9(c).

Part II of the proposed order requires Apple to provide full refunds to Apple account holders who have been billed by Apple for unauthorized in-app charges incurred by minors. Apple will refund no less than $32.5 million for these in-app charges in the year following entry of the order, and if such refunds total less than $32.5 million, Apple will remit any remaining balance to the Commission to be used for informational remedies, further redress, or payment to the U.S. Treasury as equitable disgorgement. To effectuate refunds, Apple must send an electronic notice to its consumers that clearly and conspicuously discloses the availability of refunds and instructions on how to obtain such refunds. Within 30 days of the end of the one-year redress period, Apple must provide the Commission with records of refund requests, refunds paid, and any refunds denied.

Parts III through VII of the proposed order are reporting and compliance provisions. Part III of the proposed order requires Apple to maintain and upon request make available certain compliance-related records, including certain consumer complaints and refund requests, for a period of five years. Part IV is an order distribution provision that requires Apple to provide the order to current and future principals, officers, and corporate directors, as well as current and future managers, employees, agents, and representatives who participate in certain duties related to the subject matter of the proposed complaint and order, and to secure statements acknowledging receipt of the order.

Part V requires Apple to notify the Commission of corporate changes that may affect compliance obligations within 14 days of such a change. Part VI requires Apple to submit a compliance report 90 days after March 31, 2014, the date by which Apple is required to come into full compliance with Part I of the order. It also requires Apple to submit additional compliance reports within 10 business days of a written request by the Commission. Part VII is a provision ''sunsetting'' the order after twenty (20) years, with certain exceptions.

The purpose of this analysis is to aid public comment on the proposed order. It is not intended to constitute an official interpretation of the complaint or proposed order, or to modify in any way the proposed order's terms.

By direction of the Commission, Commissioner Wright dissenting.

Donald S. Clark,

[illegible]

Statement of Chairwoman Edith Ramirez and Commissioner Julie Brill

The Commission has issued a complaint and proposed consent order to resolve allegations that Apple Inc. unfairly failed to obtain informed consent for charges incurred by children in connection with their use of mobile apps on Apple devices in violation of Section 5 of the Federal Trade Commission Act. Consistent with prior application of the Commission's unfairness authority, our action today reaffirms that companies may not charge consumers for purchases that are unauthorized—a principle that applies regardless of whether consumers are in a retail store, on a Web site accessed from a desktop computer, or in a digital store using a mobile device.

As alleged in the Commission's complaint, Apple violated this basic principle by failing to inform parents that, by entering a password, they were permitting a charge for virtual goods or currency to be used by their child in playing a children's app and at the same time triggering a 15-minute window during which their child could make unlimited additional purchases without further parental action. As a consequence, at least tens of thousands of parents have incurred millions of dollars in unauthorized charges that they could not readily have avoided. Apple, however, could have prevented these unwanted purchases by including a few words on an existing prompt, without disrupting the in-app user experience. As explained below, we believe the Commission's allegations are more than sufficient to satisfy the standard governing the FTC Act's prohibition against ''unfair acts or practices.''

I. Overview of In-App Purchases on Apple Mobile Devices

Apple distributes apps, including games, that are likely to be used by children on Apple mobile devices through its iTunes App Store. While playing these games, kids may incur charges for the purchase of virtual items such as digital goods or currency (known as ''in-app charges'') at prices ranging from $.99 to $99.99. These in-app charges are billed to their parents' iTunes accounts. Apple retains thirty percent of the revenues from in-app charges. As part of the in-app purchasing process, Apple displays a general prompt that calls for entry of the password for the iTunes account associated with the mobile device. Apple treats this password entry as authorizing a specific transaction and simultaneously allowing additional in-app purchases for 15 minutes.

While key aspects of the in-app purchasing sequence have changed over time, as described in the Commission's complaint, one constant has been that Apple does not explain to parents that entry of their password authorizes an in-app purchase and also opens a 15-minute window during which children are free to incur unlimited additional charges. We allege that, since at least March 2011, tens of thousands of consumers have complained about millions of dollars in unauthorized in-app purchases by children, with many of them individually reporting hundreds to thousands of dollars in such charges. As a result, we have reason to believe, and have alleged in our complaint, that Apple's failure to disclose the 15-minute window is an unfair practice that violates Section 5 because it has caused or is likely to cause substantial consumer injury that is neither reasonably avoidable by consumers nor outweighed by countervailing benefits to consumers or competition.[1]

The proposed consent order resolves these allegations by requiring Apple to obtain informed consent to in-app charges. The order also requires Apple to provide full refunds, an amount no less than $32.5 million, to all of its account holders who have been billed for unauthorized in-app charges incurred by minors.[2]

II. Application of the Unfairness Standard

Importantly, the Commission does not challenge Apple's use of a 15-minute purchasing window in apps used by kids. Rather, our charge is that, even after receiving at least tens of thousands of complaints about unauthorized charges relating to in-app purchases by kids, Apple continued to fail to disclose to parents and other Apple account holders that entry of a password in a children's app meant they were approving a single in-app charge plus 15 minutes of further, unlimited charges.

In asserting that Apple violated Section 5's prohibition against unfair practices by failing to obtain express informed consent for in-app charges incurred by kids, we follow a long line of FTC cases establishing that the imposition of unauthorized charges is

[1] 15 U.S.C. 45(n).

[2] Any sum below $32.5 million that is not returned to account holders is to be paid to the FTC.

[14] . at 4.

[15] [illegible]

widely-used product.[2] I do not believe, however, that today's action implicates such concerns. First, Apple's iterative approach was not the cause of the harm the complaint challenges. In fact, Apple's iterative approach should have made it easier for the company to update its design in the face of heavy consumer complaints. Second, we are not penalizing Apple for failing to have anticipated every potential issue in its complex platform.[3] The complaint challenges only one billing issue of which Apple became well aware but failed to address in subsequent design iterations. By March 2011, consumers had submitted more than ten thousand complaints to Apple stating that its billing platform for in-app purchases for children's apps was failing to inform them about what they were being billed for and when. Although Apple adjusted certain screens in response and offered refunds, it still failed to notify account holders that by entering their password they were initiating a fifteen-minute window during which children using the app could incur charges without further action by the account holder. Even if Apple chose to forgo providing this information—the type of information that is critical for any billing platform, no matter how innovative, to provide—in favor of what it believed was a smoother user experience for some users, the result was unfair to the thousands of consumers who subsequently experienced unauthorized in-app charges totaling millions of dollars.[4]

Commissioner Wright also argues that under our unfairness authority "substantiality is analyzed relative to the magnitude of any offsetting benefits," [5] and concludes that compared to Apple's total sales or in-app sales, injury was not substantial and that any injury that did occur is outweighed by the benefits to consumers and competition of Apple's overall platform. The relevant statutory provision focuses on the substantial injury caused by an individual act or practice, which we must then weigh against countervailing benefits to consumers or competition from that act or practice.[6] Thus, we first examine whether the harm caused by the practice of not clearly disclosing the fifteen-minute purchase window is substantial and then compare that harm to any benefits from that particular practice, namely the benefits to consumers and competition of not having a clear and conspicuous disclosure of the fifteen-minute billing window. It is not appropriate, however, to compare the injury caused by Apple's lack of clear disclosure with the benefits of the entire Apple mobile device ecosystem. To do so implies that all of the benefits of Apple products are contingent on Apple's decision not to provide a clear disclosure of the fifteen-minute purchase window for in-app purchases. Such an approach would skew the balancing test for unfairness and improperly compare injury "oranges" from an individual practice with overall "Apple" ecosystem benefits.

Dissenting Statement of Commissioner Joshua D. Wright

Today, through the issuance of an administrative complaint, the Commission alleges that Apple, Inc. ("Apple") has engaged in "unfair acts or practices" by billing parents and other iTunes account holders for the activities of children who were engaging with software applications ("apps") likely to be used by children that had been downloaded onto Apple mobile devices.[1] In particular, the Commission takes issue with a product feature of Apple's platform that opens a fifteen-minute period during which a user does not need to re-enter a billing password after completing a first transaction with the password.[2] Because Apple does not expressly inform account holders that the entry of a password upon the first transaction triggers the fifteen-minute window during which users can make additional purchases without once again entering the password, the Commission has charged that Apple bills parents and other iTunes account holders for the activities of children without obtaining express informed consent.[3]

Today's action has been characterized as nothing more than a reaffirmance of the concept that "companies may not charge consumers for purchases that are unauthorized." [4] I respectfully disagree. This is a case involving a miniscule percentage of consumers—the parents of children who made purchases ostensibly without their authorization or knowledge. There is no disagreement that the overwhelming majority of consumers use the very same mechanism to make purchases and that those charges are properly authorized. The injury in this case is limited to an extremely small—and arguably, diminishing—subset of consumers. The Commission, under the rubric of "unfair acts and practices," substitutes its own judgment for a private firm's decisions as to how to design its product to satisfy as many users as possible, and requires a company to revamp an otherwise indisputably legitimate business practice. Given the apparent benefits to some consumers and to competition from Apple's allegedly unfair practices, I believe the Commission should have conducted a much more robust analysis to determine whether the injury to this small group of consumers justifies the finding of unfairness and the imposition of a remedy.

Section 5 of the FTC Act prohibits, in part, "unfair . . . acts or practices in or affecting commerce." [5] As set forth in Section 5(n), in order for an act or practice to be deemed unfair, it must "cause[] or [be] likely to cause substantial injury to consumers which is not reasonably avoidable by consumers themselves and not outweighed by countervailing benefits to consumers or competition." [6]

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[2] I am concerned about any action that this agency takes that is likely to have adverse effects on firms' incentives to innovate. For example, in the antitrust context, I voted against the Commission's complaints in and based in significant part on my concern that those enforcement actions would hamper intellectual property rights and innovation more generally. Motorola Mobility LLC & Google Inc., FTC File No. 121–0120, Dissenting Statement of Commissioner Maureen K. Ohlhausen (Jan. 3, 2013), /2013/01/ 130103 ; Robert Bosch GmbH, FTC File No. 121–0081, Statement of Commissioner Maureen K. Ohlhausen (Nov. 26, 2012), /2013/04/ 121126

[3] The complaint challenges harm that occurred since March 2011, after Apple changed its process to require the entry of the account holder's iTunes password before incurring any in-app charges immediately after installation. Previously, the entry of the password to install an app also opened a fifteen-minute window during which charges could be incurred without again entering a password.

[4] It is also important to note that the Commission's proposed order does not prohibit the use of the fifteen-minute window nor require that the account holder input a password for each purchase.

[5] Dissenting Statement of Commissioner Joshua D. Wright at 5.

[6] "The Commission shall have no authority under this section or section 57a of this title to declare unlawful an act or practice on the grounds that such act or practice is unfair unless the act or practice causes or is likely to cause substantial injury to consumers which is not reasonably avoidable by consumers themselves and not outweighed by countervailing benefits to consumers or to competition." 15 U.S.C. 45(n).

[1] Complaint, Apple, Inc., FTC File No. 1123108, at para. 28–30 (Jan. 15, 2014) [hereinafter].

[2] As indicated in the complaint, initially the fifteen-minute window was triggered when an app was downloaded. at para. 16. Apple changed the interface in March 2011 and subsequently the fifteen-minute window was triggered upon the first in-app purchase. at para. 17. note 13.

[3] , note 1, at para. 4, 20, 28.

[4] Statement of Chairwoman Ramirez and Commissioner Brill at 1.

[5] 15 U.S.C. 45(a).

[6] 15 U.S.C. 45(n).

[7] FTC Policy Statement on Unfairness, Int'l Harvester Co., 104 F.T.C. 949, 1070 (1984), :// . . / - - - - [hereinafter].

[8] ABA Section of Antitrust Law, Consumer Protection Law Developments, 57–59 (2009); J. Howard Beales III, Director, Bureau of Consumer Protection, Fed. Trade Comm'n, The FTC's Use of Unfairness Authority: Its Rise, Fall, and Resurrection at 9 (May 2003), :// . . / - /2003/05/ - -

analysis than is necessary under a deception theory.[15] As a former Bureau Director has noted, ''the primary difference between full-blown unfairness analysis and deception analysis is that deception does not ask about offsetting benefits. Instead, it presumes that false or misleading statements either have no benefits, or that the injury they cause consumers can be avoided by the company at very low cost.'' [16] It is also well established that one of the primary benefits of performing a cost-benefit analysis is to ensure that government action does more good than harm.[17] The discussion below explains why I believe the Commission's action today fails to satisfy the elements of the unfairness framework and thereby conclude that placing Apple under a twenty-year order in a marketplace in which consumer preferences and technology are rapidly changing is very likely to do more harm to consumers than it is to protect them.

[illegible]

Apple's choice to include the fifteen-minute window in its platform design, and its decision on how to disclose this window, resulted in harm to a small fraction of consumers. Any consumer harm is limited to parents who incurred in-app charges that would have been avoided had Apple instead designed its platform to provide specific disclosures about the fifteen-minute window for apps with in-app purchasing capability that are likely to be used by children. That harm to some consumers results from a design choice for a platform used by millions of users with disparate preferences is not surprising. The failure to provide perfect information to consumers will always result in ''some'' injury to consumers. The relevant inquiry is whether the injury to the subset of consumers is ''substantial'' as contemplated by the Commission's unfairness analysis. Consumer injury may be established by demonstrating the allegedly unfair act or practice causes ''a very severe harm to a small number''

[15] Int'l Harvester Co., 104 F.T.C. 949, 1070 (1984); [illegible] note 8, § III.

[16] [illegible] note 8, § III.

[17] Int'l Harvester, 104 F.T.C. at 1070.

[18] Int'l Harvester, 104 F.T.C. at 1064.

[19] [illegible] note 7, at n.12.

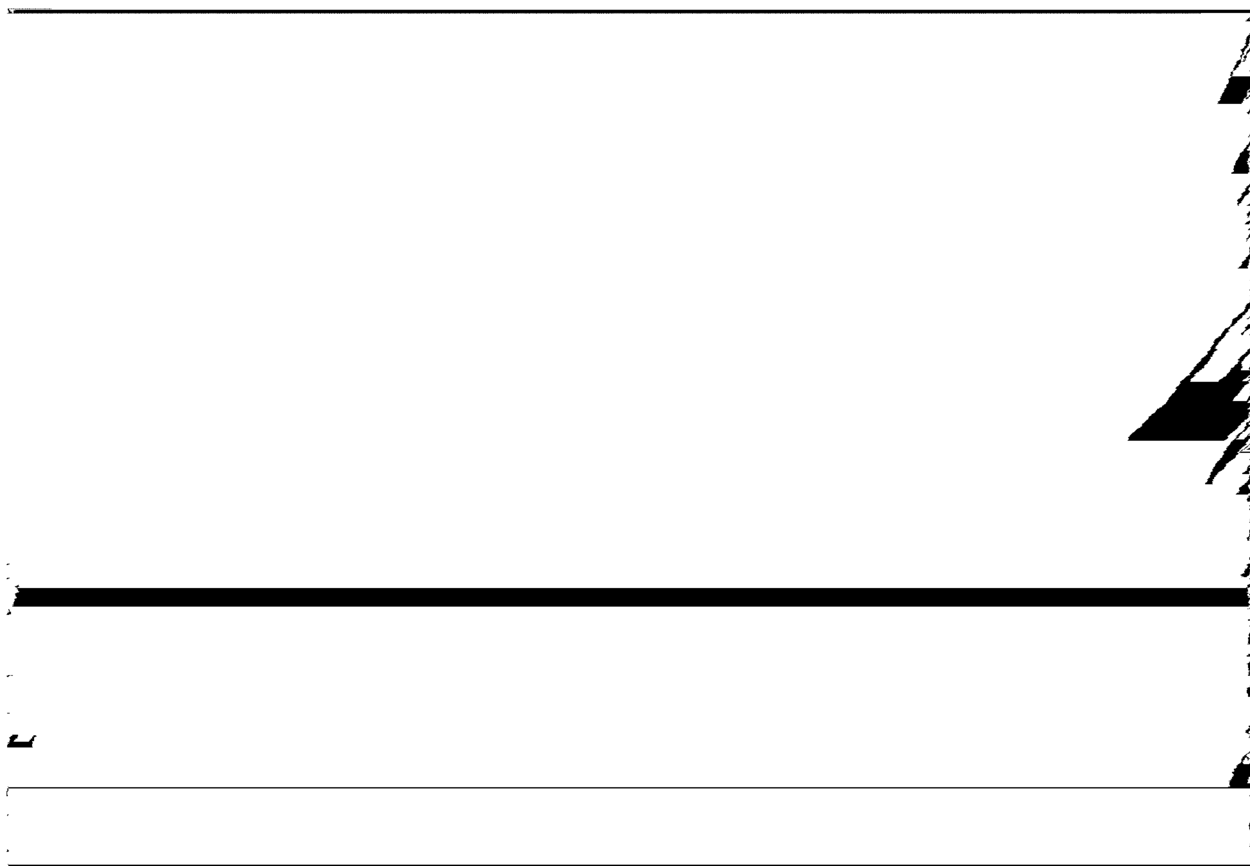
[20] [illegible] note 8, § III (''relative to the benefits, the injury may still be substantial'' and ''[t]o qualify as substantial, an injury must be real, and it must be large compared to any offsetting benefits.'').

[21] [illegible] note 1, at para. 24.

[22] Press Release, Apple, Inc., Apple's App Store Marks Historic 50 Billionth Download (May 16, 2013), [illegible] /2013/05/16 [illegible] -50- [illegible]

[23] [illegible] note 1, at para. 25–26.

[24] [illegible] note 8, § III.



: Apple, Inc., Annual Reports for 2009–2013 (Form 10–K); Marin Perez, $1.2 *2009,* InformationWeek, June 11, 2008, :// . / / / - -$12- - - -2009/ / - / *1068794;* , note 1 (for the $32.5 million settlement amount).

Chart 2 illustrates the same relationship with respect to Apple sales growth over the last 13 years.

: Same as Chart 1, plus Apple, Inc., Annual Reports for 2002–2008 (Form 10–K). Calculations assume the App Store sales and estimated unauthorized purchases grew at a constant percentage growth rate from 2009 through 2013.

Taking into account the full economic context of Apple's choice of disclosures relating to the fifteen-minute window undermines the conclusion that any consumer injury is substantial.

II. At Least Some of the Injury Could Be Reasonably Avoided by Consumers

The Unfairness Statement provides that the ''injury must be one which consumers could not reasonably have avoided.'' [25] In explaining that requirement the Commission noted, ''[i]n some senses any injury can be avoided—for example, by hiring independent experts to test all products in advance, or by private legal actions for damages—but these courses may be too expensive to be practicable for individual consumers to pursue.'' [26] The complaint does not allege that the undisclosed fifteen-minute window is an unfair practice as to any consumer other than parents of children playing games likely to be played by children that have in-app purchasing capability.[27] In the instant case, it is very likely that most parents were able to reasonably avoid the potential for injury, and this avoidance required nothing as drastic as hiring an independent expert, but rather common sense and a modicum of diligence.

The harm to consumers contemplated in the complaint involves app functionality that changed over time. In the earliest timeframe, the harm occurred when a parent typed in their Apple password to download an app with in-app purchase capability, handed the Apple device to their child, and then unbeknownst to the parent, the child was able to make in-app purchases by pressing the ''buy'' button during the fifteen-minute window in which the password was cached. This was apparently an oversight on Apple's part. When it came to the company's attention, Apple implemented a password prompt for the first in-app purchase after download.[28]

During the later timeframe, after being handed the Apple device, a child again would press the ''buy'' button to make an in-app purchase. At this point, the child would have needed to turn the device back over to the parent for entry of the password. Alternatively, some children may have known their parent's password and entered it themselves. In either case, the fifteen-minute window was opened and additional in-app purchases could be made without further password prompts.

Under the first scenario, account holders received no password prompt for the first in-app purchase and thus

[25] note 7, at 1074.

[26] note 7, at n.19.

[27] Indeed, there are many financial, banking, and retail apps and Web sites that allow consumers to conduct a series of transactions after entering a password only once. These services usually only require re-entry of a password after a certain amount of time has elapsed, or the session expires because of inactivity on the user's part. It is doubtful that the Commission would bring an unfairness case because these services do not disclose this window.

[28] Foresman, note 13.

[29] Furthermore, Apple sends an email receipt to the iTunes account holder after a purchase has been made in the either the iTunes or App Store. ., :// . . / /.

[30] To the extent that users read the Apple Terms and Conditions when they opened their iTunes accounts, consumer injury would also have been avoided. The Terms and Conditions explain the fifteen-minute window and other aspects of how Apple's platform works, including the App Store. It appears that Apple has included these explanations since at least June 2011. :// . . / / - / / / . # (Apple's current Terms and Conditions) and :// . . / - / */2011/06/2011.06.09-* - - - - *-2011-* - . (cached copy of what appears to be its Terms and Conditions as of June 2011).

[31] The Terms and Conditions also explain how to use the parental control settings to control how the App Store works. :// . . / / *1904* and :// . . / / *4213.* These parental control settings allow users to disable in-app purchasing capability as well as establish settings that require a password each time a purchase is made, thereby eliminating the fifteen-minute window.

[32] , note 7, at 1073–74.

[33] Compare the disclosure contemplated here with disclosure in the mortgage context, for example. Here, the disclosure itself—or the guidance offered while the user is interacting with the product—is an intrinsic part of the product's value. Indeed, Apple's business model is built on offering an integrated platform with a clean design that customers find intuitive and easy to use. The way the platform is presented, including disclosures or guidance offered during use, is a critically important component of value. In the mortgage context, the disclosures signed at closing are not a significant component of the value of the mortgage.

[34] In 2012, sales of the iPhone, iPad, and iPod accounted for over 76 percent of Apple's $157 billion in sales. Apple, Inc., Annual Report (Form 10–K), at 73 (Oct. 31, 2012),

The relevant universe for assessing unfairness of Apple's guidance provision, including disclosures relating to the fifteen-minute window, is the set of users to whom the guidance is directed. This includes all users of Apple's platform who might make online purchases through the platform.

The ratio of estimated unauthorized purchases in this case to all purchases made by users of Apple's platform is miniscule, as Charts 1 and 2 illustrate. This fact, by itself, does not establish that the benefits of Apple's decision to forgo additional guidance of the type required by the consent order outweigh its costs. However, the remarkably low ratio does provide perspective on the following question: How much would the average non-cancelling customer need to be harmed by a requirement of additional guidance in order to outweigh the benefit of preventing harm to other consumers? Suppose the fraction of customers that would benefit from additional guidance is approximated by the ratio of estimated unauthorized purchases to total sales of iDevices. The analysis in Charts 1 and 2 indicates that estimated unauthorized purchases have been about 0.08 percent of iDevice-related sales since the App Store was launched. Suppose that customers that make unauthorized purchases cancel them and seek a refund. Suppose also that the time cost involved in seeking a refund return is $11.95.[35] Then, if the average harm to non-cancelling customers from additional guidance sufficient to prevent cancellations is more than about a penny per transaction, the additional guidance will be counter-productive.[36]×

To be clear, the sales of iDevices are not an estimate of consumer benefits but rather they approximate the total universe of economic activity implicated by the Commission's consent order. Similarly, estimated unauthorized purchases merely approximate the total universe of consumers potentially harmed by Apple's practices. The harm from Apple's disclosure policy is limited to users that actually make unauthorized purchases. However, the potential benefits from Apple's disclosure choices are available to the entire set of iDevice users because these are the consumers capable of purchasing apps and making in-app purchases. The disparity in the relative magnitudes of these universes of potential harms and benefits suggests, at a minimum, that further analysis is required before the Commission can conclude that it has satisfied its burden of demonstrating that any consumer injury arising from Apple's allegedly unfair acts or practices exceeds the countervailing benefits to consumers and competition.[37]

Nonetheless, the Commission effectively rejects an analysis of tradeoffs between the benefits of additional guidance and potential harm to some consumers or to competition from mandating guidance by assuming that "the burden, if any, to users who have never had unauthorized charges for in-app purchases, or to Apple, from the provision of this additional information is " and that any mandated disclosure would not "detract in any material way from a streamlined and seamless user experience." I respectfully disagree. These assumptions adopt too cramped a view of consumer benefits under the Unfairness Statement and, without more rigorous analysis to justify their application, are insufficient to establish the Commission's burden.

To justify a finding of unfairness, the Commission must demonstrate the allegedly unlawful conduct results in net consumer injury. This requirement, in turn, logically implies the Commission must demonstrate Apple's chosen levels of guidance are less than optimal because consumers would benefit from additional disclosure. There is a considerable economic literature on this subject that sheds light upon the conditions under which one might reasonably expect private disclosure levels to result in net consumer harm.[38]

To support the complaint and consent order the Commission issues today requires evidence sufficient to support a reason to believe that Apple will undersupply guidance about its platform relative to the socially optimal level. Economic theory teaches that such a showing would require evidence that "marginal" customers—the marginal consumer is the customer that is just indifferent between making the purchase or not at the current price—would benefit ay eveyeen port the complaintno

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[35] The $11.95 figure represents the seasonally adjust average earnings per half hour across all employees on private nonfarm payrolls, as reported by the Bureau of Labor and Statistics in May 2013. See :// . . / . / . 19. for the most recent report. The assumption is that customers that asked for returns were reimbursed for the charges as Apple attests, and that obtaining a reimbursement takes half an hour.

[36] Let Y be the harm to non-cancelling customers from additional guidance sufficient to prevent cancellations. This harm will just equal the benefit of avoiding cancellations if (% Cancelling) × (Refund Time Cost) ¥ (% Not Cancelling) × Y = 0. Assuming (% Cancelling) is .0008, (Refund Time Cost) is $11.95, and (% Not Cancelling) is .9992, solving for Y gives Y = $.009. In other words, if the harm to non-cancelling customers from additional guidance is more than roughly one cent for each transaction, then then the costs of the additional guidance will outweigh the benefits.

[37] Commissioner Ohlhausen suggests that our unfairness analysis compares inappropriately the injury caused by Apple's lack of clear disclosure with the benefits of Apple's disclosure policy to the entire ecosystem. She argues that this approach "skew[s] the balancing test for unfairness and improperly compare[s] injury 'oranges' from an individual practice with overall 'Apple' ecosystem benefits." Statement of Commissioner Ohlhausen at 3. For the reasons discussed, this analysis misses the point.

[38] Disclosure in this context is analogous to a quality decision that may affect different customers differently. A. Michael Spence, , 6 Bell J. of Econ. 417–29 (1975); Eytan Sheshinski, *P* , , 43 Economica 127–37 (1976). The analysis of this issue is also explained in Jean Tirole, The Theory of Industrial Organization § 2.2.1 (MIT Press 1988).

[39] Spence, note 38.

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[40] This argument does not, as Chairwoman Ramirez and Commissioner Brill suggest, '' that a sufficient number of Apple customers will respond to the lack of adequate information by leaving Apple for other companies.'' Statement of Chairwoman Ramirez and Commissioner Brill at 5–6. Nor does the economic logic require any belief about the magnitude of switching costs. Rather, the analysis relies only upon the standard economic assumption that Apple chooses disclosure to maximize shareholder value, weighing how customers react to different disclosure policies. If Apple behaves this way, the average benefit of more disclosure to unaffected customers is less than the benefit to affected customers, and affected customers are more likely to be on the margin than unaffected customers, then economic theory implies that Apple is likely to have more than enough incentive to disclose.

[41] , note 7, at 1073–74.

[42] The Commission must take ''account of the various costs that a remedy would entail'' including ''reduced incentives to innovation and capital formation, and similar matters.'' , note 7, at 1073–74.

[43] , note 7, at 1073–74.

[44] Foresman, note 13.