

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of

CTIA Petition for Expedited Declaratory
Ruling on Early Termination Fees

WT Docket No. 05-194

Declaration

of

LEE L. SELWYN

on behalf of

Wireless Consumers Alliance *et al*

May 11, 2006

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DECLARATION OF LEE L. SELWYN

EXECUTIVE SUMMARY

The focus of two proceedings presently pending at the Commission (a petition filed by SunCom, a wireless provider, and another filed subsequently by the Cellular Telecommunications and Internet Association (“CTIA”), a trade association for wireless carriers) is whether, as a legal matter, state courts are preempted from applying state contract and consumer protection laws to wireless carriers’ liquidated damages early termination fees (“ETFs”) on the basis that they constitute “rates charged” within the meaning of 47 U.S.C. §332(c)(3)(A). The Wireless Consumers Alliance, AARP, and others have filed extensive legal arguments supporting the denial of these petitions.

Last fall, in an attempt to bolster CTIA’s position, Verizon Wireless submitted the Declaration of Prof. Jerry A. Hausman (“Hausman”) in support of the propositions(1) that consumers “prefer” plans with ETFs over those without any fixed term commitment or penalty, and (2) that litigation now pending in several states challenging certain carriers’ ETFs, if not held to be preempted by the Commission, would produce negative consequences for consumers in the form of increased monthly service prices and/or decreases in the handset subsidies offered by CMRS carriers to subscribers. Verizon Wireless also claims that Prof. Hausman’s declaration “makes the point” that “as an economic matter, ETFs are part of a wireless carrier’s pricing structure.” This declaration responds to Prof. Hausman’s claims and to claims made by Verizon Wireless in purported reliance upon his declaration. I demonstrate that:

- (1) Contrary to Verizon Wireless’ assertion, nothing in the Hausman declaration demonstrates “as an economic matter” that ETFs are “rates” – as opposed to a non-rate (i.e., terms and conditions) part of the economic bargain between the customer and the wireless carrier. Hausman uses the term “rate structure” in a vastly overbroad manner, to encompass all aspects of the economic bargain – and provides no “economic” justification for this approach. Hausman’s characterization of carriers’ early termination fees as part of their “rate structure” is premised upon the notion that ETFs *affect* rates. As I discuss at length below, this purported linkage between ETFs and monthly service/handset prices is extremely dubious. But even if Hausman had demonstrated a causal connection between ETFs and service or handset prices – and he has not done so – that would not establish that ETFs are “rates charged” or part of the wireless carriers’ “rate structure.” Contracts include many non-price terms that contain economic significance but that are in no respect “rates charged;” moreover, the notion of a “rate structure” has a specific meaning that cannot be extended to encompass any and all “rate-affecting” terms and conditions of the economic

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bargain between the provider and the consumer. Non-price terms and conditions have economic values that can “affect” rates without themselves being “rates.”

- (2) The fact that most consumers purchase wireless service under term contracts does not constitute a “revealed preference” for early termination fees. “Revealed preference,” as that term is understood in the economics literature, requires not just consumer acceptance of one product, but also *affirmative rejection of the other products within the “set” of available and known alternatives that satisfy the customer’s need and budget constraint*. Critically, Hausman does not establish (and I find no evidence to support the proposition) that consumers have been offered (and have been made aware of) plans *without ETFs* that satisfy the same needs and that fit within their budget space.
- (3) Wireless carriers employ several market segmentation devices in which prepaid plans without ETFs and post-paid term plans with termination fees are targeted to different groups of customers. Prepaid plans are targeted to low-use and low-income customers (such as those that could not qualify for credit cards or for post-paid service), whereas post-paid plans are generally offered with block-of-time pricing at higher overall price points than for prepaid services. Since there is likely to be a strong correlation between the level of use that a consumer makes of his/her cell phone and his/her willingness to pay, block-of-time plans with varying numbers of minutes also serve to further segment the market. The significant amount of market segmentation as between prepaid and postpaid services suggests that both types of service were not in the consumers’ “set” of choices at the time that the decision to purchase the post-paid service was made. In particular, when considered together with the consumer’s budget constraint, the required level of use will often create a set of alternatives that includes *only* post-paid, contract plans with ETFs.
- (4) Wireless carriers have adopted a “platform pricing” model in which the initial, or “platform” purchase is subsidized with the shortfall recovered through high-margin derivative products and services that rely upon the platform. For such “platform products,” once the platform is selected, the subsequent derivative purchases are confined to only those offered or licensed by the initial platform provider. In so doing, the platform provider acquires market power with respect to purchases of its derivative products or services, even where the initial platform is itself offered under competitive conditions. There are, in fact, numerous examples of “platform products” throughout the economy. One classic example of a “platform product” is the Gillette razor, which only accepts blades manufactured by Gillette. Others include Polaroid cameras that only accept Polaroid film, Sony GameBoys that only accept compatible Sony gaming software, Microsoft X-Box game platforms and compatible software, and HP inkjet or laser printers and compatible ink and toner cartridges. With “platform” pricing, each individual price component confronts its own demand elasticity conditions and, as such, will be set to maximize profits in light of those conditions. Subsidization of upfront costs with the shortfall made up through subsequent derivative

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purchases is a widely-used business model, and neither relies upon nor requires term plans and early termination fees. This pricing model neither expects nor requires that each *individual* customer purchase a sufficient amount of the derivative complementary product such that each individual customer will return a net profit to the supplier or otherwise “make the supplier whole;” it requires only that in the aggregate the pricing model optimize profit relative to a pricing regime in which each component is set in relation to cost. Unless the existence of the ETF in some consequential way alters or affects the own- and cross-price elasticities associated with handsets, monthly wireless network access, airtime usage, or other usage elements (e.g., text messaging, photos, ringtones, etc.), there is no reason why any of these would be different *or would be set differently* based upon the presence or absence of an ETF.

- (5) Hausman’s conclusion that carriers will lose revenues or sustain increased costs, and that they will be compelled and permitted under competitive conditions to recover this “gap” through higher prices, is rooted in the unfounded assumption that if consumers challenging certain carriers’ ETFs in various state court proceedings were to prevail, *every* ETF of *every* wireless carrier would be eliminated. He does not consider the more likely outcome – that some carriers in some states may be required to modify their ETFs to comport with the limitations set forth in state contract/consumer protection laws – making any unilateral increases in monthly prices or decreases in handset subsidies all but impossible.
- (6) Moreover, Hausman fails to substantiate his assumption that the level of unrecovered costs would rise by any consequential amount if wireless carriers were prevented from maintaining their existing ETFs. Evidence shows that ETFs are rarely collected (a fact that bolsters the theory that their primary purpose is as a deterrent to customer defection). Since the measurement of any prospective “loss” in cost recovery is limited by the amount the wireless carrier is able to collect today with its existing ETFs in place, there is no legitimate basis for Hausman’s apocalyptic prediction.
- (7) To the extent that ETFs work to discourage customers from changing service providers (making them *unaddressable* by other service providers during the entire contract term), eliminating term ETFs could actually *increase* inter-carrier competition and lead to lower prices overall.

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DECLARATION OF LEE L. SELWYN

INTRODUCTION

Lee L. Selwyn, of lawful age, declares and says as follows:

1. My name is Lee L. Selwyn; I am President of Economics and Technology, Inc. (“ETI”), Two Center Plaza, Suite 400, Boston, Massachusetts 02108. ETI is a research and consulting firm specializing in telecommunications and public utility regulation and public policy. I have participated in numerous proceedings before the Federal Communications Commission (“FCC” or “Commission”) dating back to 1967 and have appeared as an expert witness in hundreds of state proceedings before more than forty state public utility commissions. My Statement of Qualifications is annexed hereto as Attachment 1 and is made a part hereof.

2. I have had extensive experience in a number of state and federal regulatory matters dealing specifically with the Commercial Mobile Radio Service (“CMRS”) industry since the

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1 “first round” 800 MHz cellular application process that was initiated by the FCC in 1981. I and
2 my firm provided economic and financial analysis in support of approximately thirty applications
3 in the “top ninety” cellular markets in 1982 and 1983. I was a principal in ten “third round”
4 applications and served on the Partners Committee of Albany (New York) Cellular Telephone
5 Company until approximately 1986 (I currently hold no financial interest in any wireless service
6 provider). I provided expert testimony on behalf of several “A-block” (non-wireline) cellular
7 licensees in various state regulatory proceedings during the start-up phase of their operations, in
8 cases dealing with contested “head start” issues and landline interconnection. This included an
9 appearance on behalf of McCaw/Intrastate Cellular Systems, then a partner in Bay Area Cellular
10 Telephone Company, in a 1983-84 California PUC proceeding, Application No. 83-07-04. I was
11 engaged by the Division of Ratepayer Advocates (DRA) of the California PUC as a consultant
12 and expert in Investigation 93-02-028 dealing with the 1993 spin-off of Pacific Telesis Group’s
13 cellular and wireless subsidiaries. I also served as a consultant to the County of Los Angeles, a
14 party in the California PUC’s Investigation into Mobile Telephone Service and Wireless
15 Communications, Investigation 93-12-007. I co-authored comments, reply comments and ex
16 parte presentation materials on behalf of the Ad Hoc Telecommunications Users Committee in
17 the FCC’s *Wireless Calling Party Pays* rulemaking, WT Docket No. 97-207. In 1999, I appeared
18 as a witness on behalf of Meteor Mobile Communications, Inc. before the High Court of Ireland,
19 Docket 1998 No. 12160P, involving the Competition for the Third Mobile Telephony License in
20 the Republic of Ireland. In July 2003, I co-authored a white paper entitled “Market-based
21 Solutions for Realigning Spectrum Use in the 800 MHz Band,” and in December 2004, I co-
22 authored “Market-based Valuation vs. Third-party Appraisals as a Means to Ensure Fair
23 Valuation and Efficient Allocation of 1.9 GHz Spectrum,” both submitted by counsel for James

1 A. Kay, Jr. in FCC WT Docket No. 02-55. I have also been engaged by several state and
2 municipal taxation authorities regarding sales, property and other taxation issues relating to
3 wireless services.

4
5 3. In support of CTIA's Petition for Declaratory Relief filed in this proceeding, Verizon has
6 submitted the Declaration of Prof. Jerry A. Hausman ("Hausman").¹ Prof. Hausman generally
7 asserts that the early termination fees charged by CMRS carriers are "rates charged" within the
8 meaning of 47 U.S.C. §332(c)(3)(A). In support of this proposition, he argues that the effect of
9 the litigation now pending in several states challenging certain carriers' ETFs, if not held to be
10 preempted by the Commission, would result in increases in monthly service prices and/or
11 decreases in handset subsidies offered by CMRS carriers to subscribers. Hausman opines that, as
12 a result of the asserted causal connection between ETFs and monthly service prices or handset
13 subsidies, ETFs must be deemed to be part of each carrier's "rate structure." He further contends
14 that consumers prefer plans with ETFs over those without any fixed term commitment or
15 penalty, and that elimination of ETFs would thus result in harm to the public overall. I have
16 been asked by the commenting parties Wireless Consumers Alliance *et al.* (collectively "WCA")²
17 to analyze Prof. Hausman's declaration, to evaluate the validity of the assertions made therein as
18 an economic matter, and to address and respond to the issues raised therein.

1. Declaration of Jerry A. Hausman, October 19, 2005, submitted as an *ex parte* filing by Verizon Wireless, October 25, 2005 ("Hausman FCC Decl.").

2. Wireless Consumers Alliance, Porsha Meoli, Leslie Armstrong, Sridhar Krishnan, Astrid Mendoza, Christina Nguyen, Bruce Gatton, Margaret Schwarz, Kathryn Zill, Mark Lyons, Richard Samko, and Amanda Selby.

1 or part) will result in mandatory, yet less efficient, recovery of costs. It is noteworthy that all of
2 these putative wireless “competitors” have, nevertheless, joined together via their industry trade
3 association, the CTIA, in collectively seeking to protect their “competitively innovative” use of
4 ETFs. (Later in this Declaration I demonstrate why Hausman fails to substantiate his claims that
5 consumers would pay more for wireless services or otherwise be worse off if the particular ETFs
6 being challenged in state courts (or even ETFs generally) were modified or eliminated.)

7

8 6. Innovation is not limited to price terms, however. There are numerous other ways of
9 competing. Moreover, not every “innovation,” even if facially attractive to consumers, is
10 consistent with contract and consumer protection laws. The vast majority of the ordinary
11 consumer products and services to which state contract laws apply – including provisions that
12 prohibit penalties and require a reasonable basis for liquidated damages – are offered in
13 competitive markets and are not (and never have been) subject to rate regulation. In enacting
14 §332(c)(3)(A), Congress drew a clear distinction between “rates charged” (which are federally
15 preempted) and “other terms and conditions” that are expressly reserved to the states. The
16 suggestion that in preempting “rates charged” Congress would have afforded consumers of
17 wireless services *less protection under state law* than is afforded virtually every other consumer
18 product or service is not supportable.

19

20 **Non-price terms and conditions have economic values that can “affect” rates without**
21 **themselves being “rates.”**

22

23 7. Along these same lines, in its recent *ex parte* pleading, Verizon Wireless expresses
24 outrage that WCA persists in claiming that ETFs are not rates after Verizon’s “world-renowned

1 economist,” Professor Hausman, “makes the point” that “as an economic matter,” ETFs are part
2 of a wireless carrier’s pricing structure for recovering revenues to offset costs. The words “as an
3 economic matter” are counsel’s alone. Hausman does alternatively refer to the use of ETFs as
4 part of carriers’ “post-pay price plans” and of their “rate structures,” but he provides no
5 “economic” analysis or explanation of what makes these terms “rates.” And, in fact, they are
6 decidedly *not* rates.

7
8 8. What Hausman appears to assume, but does not in any sense justify, is that any non-price
9 (i.e., “other”) term or condition in a contract that, if changed, might induce the provider to
10 modify any price terms of the contract is itself a “rate” or an integral part of the provider’s “rate
11 structure.” This is demonstrably untrue. Agreements (contracts) for the purchase and sale of
12 items typically involve non-price (non-rate) terms that have economic significance and that may
13 thus be price-affecting. For example, a customer is looking to purchase a DVD player. Store
14 A’s payment terms allow the customer to use any major credit card, whereas Store B’s payment
15 terms are cash-only. Store A’s price is \$80 vs. Store B’s price of \$75, reflecting both the added
16 costs that Store A incurs in accepting credit cards and the added benefit that this payment term
17 offers to some customers. Similarly, Store C offers generous exchange or return terms, whereas
18 Store D specifies “final sale, no returns or exchanges” on all purchases. All else equal,
19 customers may well be willing to pay a slightly higher price at Store C for the ability to return
20 their purchase. The stores’ payment and return policies are non-price “terms and conditions” that
21 may well “affect” the price level for the item, but these other (i.e., non-price) terms and
22 conditions are not themselves “prices” or “rates.” Another example of a price-affecting term and
23 condition can be found in the case of product warranties. A product with a two-year warranty

1 may sell for more than the same product with no warranty. The warranty is unambiguously a
2 “term and condition” of the contract, not a rate, but its presence (or absence) is a “price-
3 affecting” term.

4
5 9. In fact, most if not all commercial transactions throughout every sector of the economy
6 involve both price and non-price terms and conditions, almost all of which will be price-affecting
7 in some manner or degree. Indeed, it is difficult to imagine a “term and condition” in a
8 commercial contract that is not price-affecting, unless the term or condition is either utterly
9 meaningless to both the buyer and the seller, or is a “drop dead” deal-breaker that, if removed,
10 would result in no agreement being consummated at all. In fact, economic theory holds that
11 anything with measurable value is capable of being captured through a monetary transaction,
12 even though the item itself is not a “price.” For example, the terms and conditions in a
13 construction contract might specify the hours during which the work can take place and the date
14 at which the project is to be completed. The contractor might be willing to accept a lower price
15 for the job if the completion date is extended and/or if the number of hours during which the
16 work can take place can be made more flexible. On the other hand, the customer may place a
17 value upon early completion, and be willing to pay extra for that benefit. Ultimately, the buyer
18 and the seller in this case will come to an agreement as to the terms and conditions – and the
19 price – for the job.

20
21 10. 47 U.S.C. §332(c)(3)(A) preempts state regulation of “rates charged” for wireless
22 services, but does “not prohibit a State from regulating the other terms and conditions of
23 commercial mobile services.” Since virtually all “other terms and conditions” are “price

1 affecting” in some manner, treating all such “terms and conditions” as “rates charged” trivializes
2 the statutory distinction between “rates charged” and “other terms and conditions” that Congress
3 has enacted, and would make the “other terms and conditions” carve-out provision of 47 U.S.C.
4 §332(c)(3)(A) a nullity.

5

6 11. Wireless carriers were historically required to file tariffs in each state in which they
7 offered service. Those tariffs consisted of “rates” and “terms and conditions.” Prior to OBRA,⁴
8 the reasonableness of “tariffs” for CMRS services were reviewed by state utilities regulators.
9 With the passage of OBRA, the “rates” for CMRS services were removed from state regulation,
10 and the rates, terms and conditions for CMRS services formerly set forth in tariffs are now set
11 forth in the service agreement (contract) between the wireless carrier and its customer. As the
12 Wireless Consumers Alliance has documented in several exhibits filed with this Commission,
13 and which I have reviewed, the wireless industry has commonly included “early termination
14 fees” within the “Terms and Conditions” of these contracts.⁵ For example, within the past
15 month, T-Mobile filed an appellate brief in California in which it clearly described its early

4. *Omnibus Budget Reconciliation Act of 1993*, Pub. L. 103-66, Aug. 10, 1993, 107 Stat. 312, as amended.

5. WC Docket Nos. 05-194/05-195, Comments of Wireless Consumers Alliance *et al.*, August 5, 2005, Exhibits D (T-Mobile Service Agreement) and E (AT&T Wireless Service Agreement); Wireless Consumers Alliance, Exhibits to Confidential Ex Parte Supplemental Appendix, filed December 28, 2005. -----

1 termination fees, together with its mandatory arbitration requirement, as “Terms & Conditions”
2 in its Customer Service Agreement:

3
4 “In addition, the box containing the new phone sent to each customer was sealed
5 with a sticker across the closing seam, thus requiring the sticker to be broken in
6 order to open the box. That sticker again notifies the subscriber of their agreement
7 to the T&C1s, including the arbitration provision:

8
9 **IMPORTANT**

10
11 Read the enclosed T-Mobile Terms &
12 Conditions. By using T-Mobile service, you
13 agree to be bound by the Terms & Conditions,
14 including the mandatory arbitration and early
15 termination fee provisions.”⁶
16

17 -----
18 -----⁷ By attempting to lump all pertinent terms and conditions of service under
19 the heading of “rates charged,” the wireless industry would deprive wireless consumers of
20 protections that apply to goods and services that have never been tariffed and have never been
21 subject to any rate regulation.

22
23 12. Hausman’s notion that ETFs are “rates charged” stems from his belief that ETFs enable
24 carriers to offer lower up-front handset prices and service fees, and that consumers would

6. California Court of Appeal for the First Appellate District – Division Five, Nos. A112082 & A112084, Opening Brief of T-Mobile USA, Inc., Defendant-Appellant, April 26, 2006, at 6.

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1 generally prefer to pay less up front and pay more through ongoing charges into the future. As I
2 will show, carriers would continue to offer low or “subsidized” up-front handset prices and
3 service fees even in the absence of ETFs. But even if elimination of ETFs would somehow
4 affect handset prices – which is highly unlikely in any event – that would still not render ETFs
5 “rates charged,” not would it justify preemption of neutral state laws of general applicability that
6 protect consumers from penalty provisions in adhesion contracts. It is hardly a novel conclusion
7 that *some* consumers would prefer to put off paying for a benefit, particularly if they can have
8 overly optimistic expectations about the consequence of the deferral. Sometimes these
9 consumers’ inclination to defer costs causes them to agree to onerous contract provisions, such as
10 high credit card finance charges or usurious interest rates. Consumer protection laws target a
11 wide range of situations in which the terms of a contract take undue advantage of consumers who
12 hope to benefit from postponing economic obligations. Thus, for example, consumer protection
13 laws set limits on the interest rates that lenders may charge. By Hausman’s reasoning, a wireless
14 provider who chose to sell a \$200 handset for \$2 and then charged the user 50 percent interest on
15 the \$198 balance would be immune from usury restrictions because these charges were part of a
16 “price plan” or “rate structure.” Similarly, state contract laws that prohibit excessive termination
17 charges in the guise of “liquidated damages” provisions do not aim to permit customers to avoid
18 paying legitimate costs, but rather to protect consumers from being penalized by incurring a
19 charge that is unrelated or disproportionate to the costs associated with their decision to terminate
20 service. However, this hardly makes the application of such laws equivalent to a traditional
21 “rate-making” determination.

22

1 13. Hausman also seeks to buttress his “ETFs are rates charged” theory by suggesting that
2 ETFs actually provide an identifiable *and material* revenue source the absence of which would
3 force CMRS carriers to raise handset prices and recurring monthly and usage charges. -----
4 -----
5 -----
6 -----, As WCA has established in its comments in these
7 proceedings, it is clear that ETFs serve to deter customers from prematurely discontinuing their
8 service.⁸ This deterrent effect may well be more important than whatever actual revenues ETFs
9 produce. In fact, when a customer is successfully discouraged from breaching the contract (by
10 ending service prior to the contract term), the ETF generates no revenue at all.

11
12 14. Finally, if one considers the case of the customer who continues service beyond the
13 contract term, the theoretical underpinnings of Hausman’s argument are again found to be
14 unstable. Under a typical term contract for wireless service, once the term commitment has been
15 fulfilled by the customer, service continues on a month-to-month basis, and may be cancelled at
16 any time by the customer without being subject to an ETF – at least until the customer initiates
17 some type of transaction with the CMRS provider that triggers a new term contract, such as
18 getting a new handset or changing service plans. If the ETF were, as Hausman claims, an
19 element of the carrier’s pricing structure that permitted the carrier to offer lower monthly
20 recurring and usage charges, and if the wireless market were as “effectively competitive” as
21 Hausman contends, then upon satisfaction of the term commitment (whereby the carrier’s
22 upfront costs are then fully recovered), one would expect to see those customers being offered

8. See, WCA Comments at 38; see also, WCA Reply Comments at 20.

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- 1 *lower* monthly and usage prices that do not include the “upfront cost recovery” component. To
- 2 the best of my knowledge, offers of that sort are not routinely made.
- 3

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1 “REVEALED PREFERENCES”

2
3 **Consumer purchases of post-paid wireless service under pricing plans that happen to**
4 **include term commitments and ETFs provides no basis for inferring that consumers**
5 **“prefer” term commitments and ETFs.**
6

7 15. In his declaration filed by Verizon with the Commission (as well as in his declaration in
8 the pending California litigation on ETFs),⁹ Hausman argues, generally, that consumers’
9 “voluntary” decision to accept term plans with ETFs demonstrates a “revealed preference” for
10 such plans, and that as such they received an economic benefit therefrom, and suffered no
11 injury.¹⁰ Hausman opines that “[t]he great majority of the Verizon Wireless subscriber base is
12 under contract, suggesting that most consumers prefer the benefits that term contracts provide,
13 despite the ETF. Moreover, Verizon Wireless’s contract-based postpaid plans are much more
14 popular than its prepaid plans, further suggesting a preference for contracts.”¹¹ He concludes that
15 “[t]he market actions, or ‘revealed preference’ of consumers, demonstrate that the economic
16 measure of injury for consumers who signed such contracts [including an ETF] is negative.
17 Otherwise, they would have chosen prepaid service.”¹² Although Hausman states that he is
18 drawing directly upon revealed preference theory, his analysis is entirely silent with respect to its
19 fundamental requirements – that revealed preference requires not just acceptance of one product,

9. Declaration of Professor Jerry A. Hausman, January 18, 2005, filed in Superior Court of the State of California in and for the County of Alameda, Judicial Council Coordination Proceeding No. 4332 (“Hausman CA Decl.”).

10. Hausman CA Decl., at para. 13-14; see also Hausman FCC Decl., at paras. 7-34, 47.

11. Hausman CA Decl., at para. 9; see also Hausman FCC Decl., at para. 37.

12. Hausman CA Decl. at para. 14, footnote reference omitted.

1 but also *affirmative rejection of the other alternatives*. He also ignores the tying of the term
2 contract/ETF with other attributes of the “preferred” postpaid service that are simply not offered
3 by Verizon *except* with its postpaid term contract/ETF plans.

4
5 16. A brief review of several key principles of revealed preference theory will be helpful in
6 understanding the errors in Hausman’s attempt at using this theory to draw inferences as to
7 consumers’ preferences for contracts and termination fees. Revealed preference relies not just
8 upon the acceptance by the consumer of certain products, but also requires the considered
9 rejection of other products. Economic theory holds that, for a consumer to have been said to
10 have exhibited a “revealed preference” for one product over another, the two products must be
11 within the same “set.” Simply put, the “set” consists of the array of products and services from
12 which a consumer makes his or her selection as satisfying a given need. A “set,” however, is
13 limited by the choices available *and known* to the consumer, and is in no sense all-encompassing.
14 For example, one recent empirical study relating to revealed preference presented participants
15 with the choice of several items with which they would be allowed to pass an hour of otherwise
16 unoccupied time in a lab.¹³ A range of choices were offered – e.g., reading materials, computer
17 games, and food. In this experiment, the group of items offered to each person represented the
18 “set” from which he or she could choose and thus “reveal a preference” for one over the other.
19 The “revealed preference” of the participants, however, does not imply that the individual prefers
20 the chosen activity over an activity that was not available or whose existence or availability was
21 not known.

13. Sippel, Reinhard, “An Experiment on the Pure Theory of Consumer’s Behaviour,” *The Economic Journal*, 107 (September 1997), 1431-1444.

1 17. Revealed preference is also subject to both the constraints of time and to changes in the
2 set of available choices. A consumer's revealed preference one day may not be valid the next
3 day. In the above example, if the experiment is conducted at 11:30 am, just before the lunch
4 hour, the test subject may be hungry when she arrives at the lab, which may cause her to reveal a
5 preference for the food item. If, alternatively, the experiment occurs at 1:00 pm – i.e., after lunch
6 – the subject may prefer the computer games. The introduction of additional choices into the set
7 may also cause the consumer's preferences to change. A consumer's revealed preference as
8 between items in one set cannot definitively order the preferences among items in another set.¹⁴
9

10 18. Finally, the set of choices will necessarily be limited by the consumer's budget; items
11 priced outside the consumer's budget should not be considered as part of the revealed preference
12 set: Consumers "choose" between items they can afford, not between the set of all items
13 theoretically available. A consumer may well "prefer" a BMW over a Honda, Toyota, or a Ford,
14 but if he only has \$20,000 to spend on a car and so does not buy the BMW, he cannot be said to
15 have "revealed a preference" for one of the other cars over the BMW.
16

17 **There is no evidence to support claims of "revealed preference" by consumers for wireless**
18 **service contract plans with ETFs**
19

20 19. Hausman asserts that since most consumers have selected wireless plans that include an
21 ETF, they have thereby "revealed" their preference for contract plans with ETFs. However, in

14. Comparisons between sets are possible only on the limited basis of common items in both sets. If, for example, item A is preferred to item B in Set 1, and item B is preferred to item C in set 2, one of the axioms of revealed preference theory states that item A will be preferred to item C.

1 order to draw this “revealed preference” inference for “contracts with an ETF,” those consumers
2 must have both known about and been offered plans *without ETFs* that fit within their budget
3 space. The only alternative to wireless plans with ETFs that Hausman cites are prepaid wireless
4 plans, which do not involve term contracts or ETFs, or a 1996 AirTouch non-term post-paid
5 service. He seeks to draw an inference that because “Verizon Wireless’s contract-based postpaid
6 plans are much more popular than its prepaid plans,” consumers reveal “a preference for
7 contracts.”¹⁵ Unfortunately, it’s not that simple.

8

9 **Post-paid plans with term commitments and ETFs and Prepaid plans not involving**
10 **term commitments and ETFs are targeted at separate and distinct market segments,**
11 **such that few customers actually make an affirmative selection of one over the other.**
12

13 20. An analysis of the marketing, pricing, and limitations of the prepaid vs. postpaid
14 services offered by Verizon Wireless indicates that the array of plans being offered by Verizon
15 Wireless was designed to support a complex profit-maximizing market segmentation strategy.
16 Ordinarily, demand for a product increases as its price decreases, producing the classic
17 “downward sloping” demand curve (see Figure 1). Suppose that there are 100 potential
18 customers for a product, and that they have been arrayed in order of their respective willingness-
19 to-pay, from highest to lowest. Suppose that there are no potential customers willing to pay
20 \$100. At \$99, there is one customer, a second customer willing to pay \$98, a third willing to pay
21 \$97, and so on, down to the 99th customer, who is only willing to pay \$1, and the 100th customer,
22 who will only take the product if it is priced at \$0, *i.e.*, free (see Figure 2). Suppose that the cost
23 of each unit of the product is \$20. At a price of \$60, the producer will sell 40 units, because

15. Hausman CA Decl., at para. 9; see also Hausman FCC Decl., at para. 47.

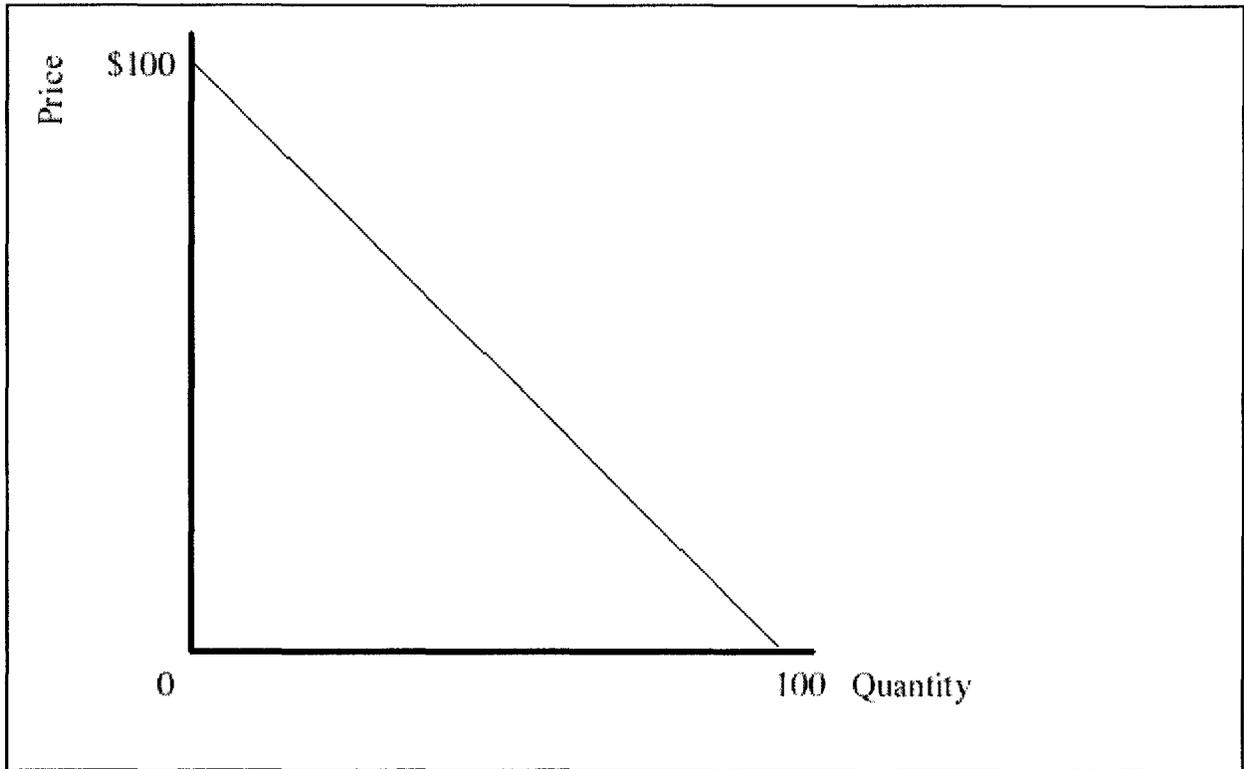


Figure 1.

1 there are 40 potential customers willing to pay at least \$60 for the product. In this example, this
2 would represent the profit-maximizing price, and would produce \$1600 of profit. But 39 out of
3 those 40 customers would have been willing to pay more than \$60, and 39 others would have
4 been willing to pay a price below \$60 but that would still have yielded a profit. So by offering
5 the product at a single \$60 price, the producer will have left a lot of money “on the table.” The
6 solution is to divide the market into identifiable “segments” with respect to the members’
7 willingness-to-pay, and to differentiate, or “discriminate,” among the various segments as to the
8 offered price. Figure 3 illustrates this type of structure. Here, the market is divided into three
9 segments, each with its own price. 20 units are sold at \$80, 20 more at \$60, and another 20 at
10 \$40, producing a total profit of \$2,400. In order to be successful, however, a market segment-

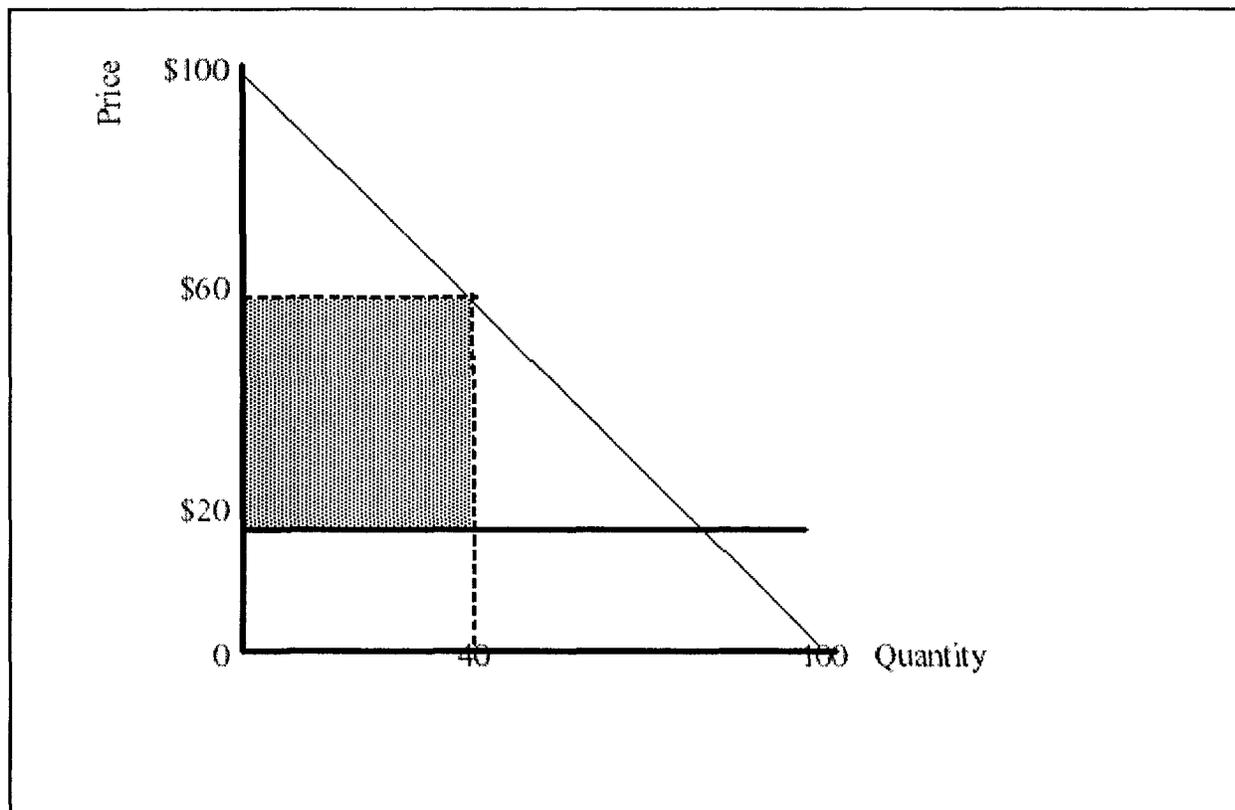


Figure 2.

1 ation/price discrimination strategy requires that the members of the various segments be
2 prevented, to the greatest extent possible, from purchasing the product at a lower price that is
3 being offered to a different segment. There are various means by which this separation can be
4 achieved. One method is to offer versions of the same product differentiated by (actual or
5 perceived) quality attributes; those willing to pay more will gravitate toward the higher-priced,
6 higher-quality version. First class vs. coach airline travel is an example of this type of
7 segmentation. Another approach is to target the marketing of the differentiated products at
8 different market segments – offering the low-priced version in low-income areas while
9 promoting the higher-priced model in the more affluent areas. Segment isolation can also be
10 achieved through purchase or use restrictions. Airlines, for example, differentiate between

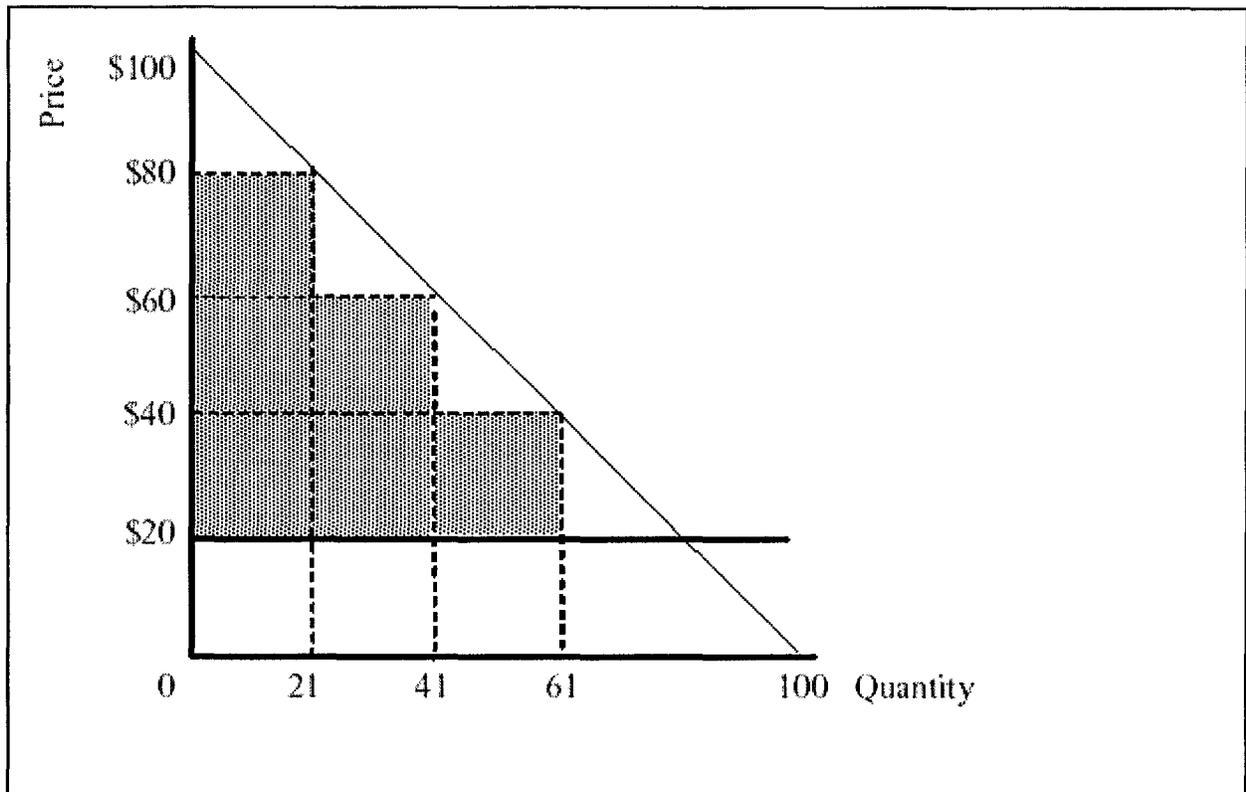


Figure 3.

1 business and pleasure travelers by means of “advance purchase” requirements, based upon their
2 determination that the more valuable business travel cannot be planned as far in advance as the
3 more discretionary vacation-type travel. Through this device, airlines are able to sell an
4 essentially undifferentiated product – seats on a particular flight – at an array of different prices
5 designed to closely track consumers’ willingness-to-pay.

6

7 21. Wireless carriers employ several of these market segmentation devices. For example,
8 prepaid plans are targeted to low-use and low-income customers (such as those that could not
9 qualify for credit cards or for post-paid service), whereas post-paid plans are generally offered
10 with block-of-time pricing at higher overall price points than for prepaid services. Since there is

1 likely to be a strong correlation between the level of use that a consumer makes of his/her cell
2 phone and his/her willingness to pay, block-of-time plans with varying numbers of minutes also
3 serve to segment the market. The significant amount of market segmentation as between prepaid
4 and postpaid services suggests that both types of service may not have been in the consumers' set
5 of choices at the time that the decision to purchase the post-paid service was made.

6

7 22. The decision as to what type of service to purchase – and the choices that will fall
8 within a given set of service alternatives – is driven by the specific need that the consumer is
9 attempting to satisfy. In the case of wireless service, a key element of that “need” is the level of
10 use that the consumer anticipates making of the wireless service. When considered together with
11 the consumer’s budget constraint, the required level of use will often create a set of alternatives
12 that includes *only* post-paid, contract plans with ETFs. Without the opportunity to affirmatively
13 consider *and reject* the prepaid offering, no “revealed preference” inference as between no-
14 contract prepaid and term contract postpaid services can be drawn.

15

16 23. In the US, the marketing and promotion of wireless service is heavily skewed toward
17 post-paid plans with termination liabilities. Most of the advertising for *prepaid* wireless services
18 emphasizes features and selling points such as “no credit card” and/or “no credit check,” and is
19 targeted to consumers with no or bad credit, with low or sporadic usage. Prepaid plans differ
20 from post-paid services in more than timing of payments and credit-worthiness of the customer.
21 In prepaid plans, consumers typically purchase, in advance, a specific number of minutes that
22 expire within a relatively short span of time, usually between 30 and 60 days. If the minutes
23 expire or are used up by the consumer before purchasing additional minutes, the service may be

1 cut off and, in some cases, the wireless telephone number will be reclaimed for reassignment to
2 another customer. If the prepaid minutes are used up while a call is in progress, the call will be
3 cut off. Prepaid services typically offer more restrictive home service areas than do post-paid
4 plans, sometimes imposing high roaming charges on calls that in post-paid services would be
5 treated as home service area calls. These non-contract-related distinctions eliminate prepaid
6 wireless plans as viable options for consumers looking for a *reliable, consistent, and flexible*
7 wireless service.

8
9 24. Furthermore, so-called “family” plans are an extremely popular type of service that is
10 simply not offered on a prepaid basis. In these plans, consumers purchase a single (typically
11 large) “bucket” of minutes and several phones (usually parents and children) draw from the
12 common block of minutes. Typically in family plans, calls among family members are free.
13 Consumers interested in family plans are unlikely to view prepaid services as falling within their
14 set of alternatives. Permanent numbers and consistent and flexible service are only offered under
15 post-paid plans.

16
17 **Customers must also be fully aware of all choices in order for their selection of one to**
18 **be evidence of a “revealed preference” vis-a-vis the other.**
19

20 25. Even if non-term plans were available, their mere existence does not by itself support
21 Hausman’s inference of consumer “revealed preference” for plans with an ETF. In order for a
22 wireless carrier’s non-term plans (to the extent they exist) to be considered as falling within the
23 same “set” of consumer choices as plans with an ETF, consumers must know that such non-term
24 plans are available, those non-term plans must actually be offered to those consumers, and

1 consumers must be afforded an opportunity to affirmatively reject the non-term service
2 alternative. Absent customer awareness of the existence and availability of comparable non-
3 term, non-ETF offerings, there can be no inference as to any “revealed preference” as between
4 term plans with ETFs and what are at best stealth non-term, non-ETF service offerings, if in fact
5 any even exist at all.

6

7 26. In both the prepaid and non-term plan examples, Hausman argues that revealed
8 consumer preference exists for term- or contract plans with ETFs on the theory that most
9 consumers have in fact purchased wireless services on this basis. However, Verizon’s prepaid
10 and post-paid services are not comparable and as such rarely if ever fall within the same set of
11 alternatives from which individual consumers choose. The practical effect of this differentiated
12 marketing is a segmented market and a high likelihood that consumers will either not know about
13 these alternative services or will not consider these services as part of their “set” for the purposes
14 of revealed preference.

15

16 27. In addition to the problems created by wireless carrier marketing practices for
17 Hausman’s attempt to apply revealed preference theory to draw inferences as to purported
18 consumer “preferences” for contract plans, a consumer’s budget for wireless service may also
19 operate to exclude prepaid services from the revealed preference set. Figure 4 shows the relative
20 prices for the same usage levels under Verizon’s pre-paid and post-paid wireless plans. As
21 illustrated in this graph, the usage levels at which the pricing for the two types of service begins
22 to diverge is very low, around 300-400 minutes if the consumer does not roam or make use of
23 any other services subject to additional charges under the prepaid plans.

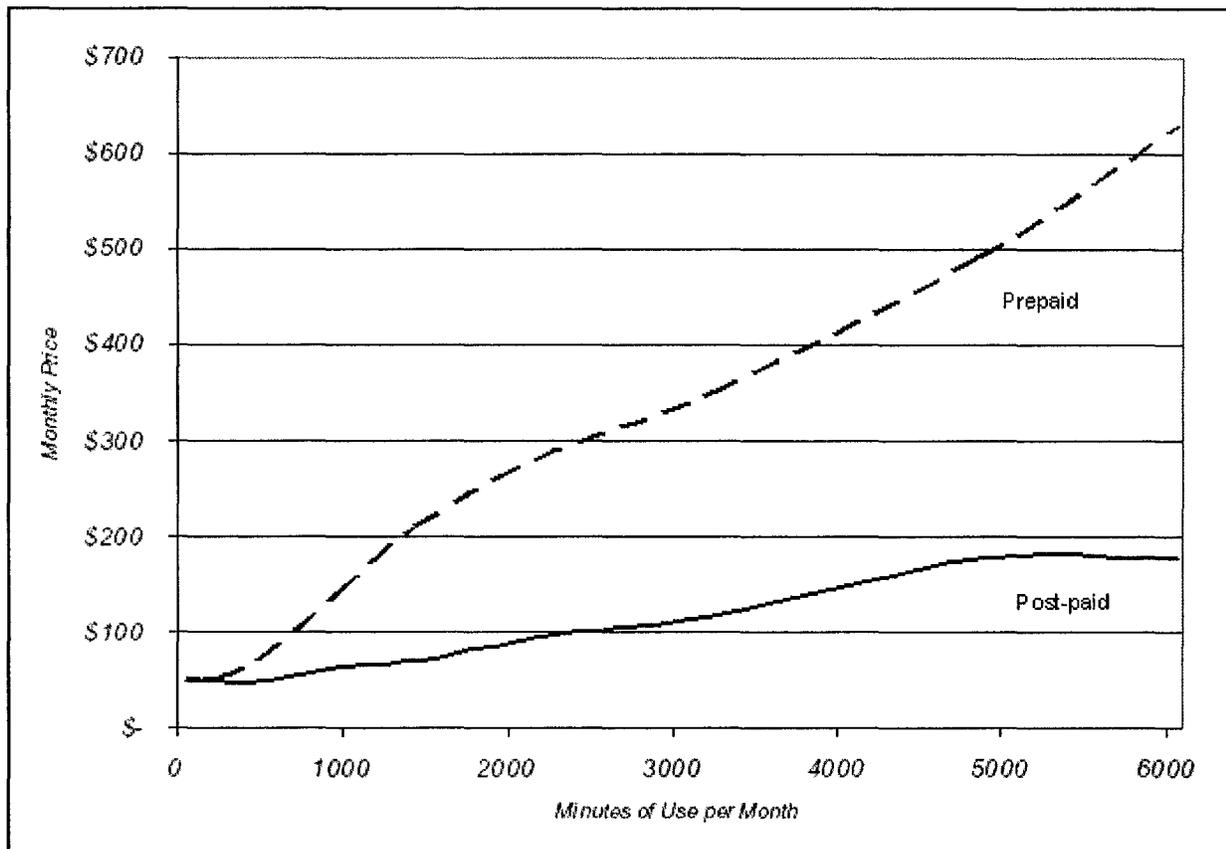


Figure 4. Monthly cost of Verizon Wireless prepaid and post-paid services at various usage levels.

1 28. At relatively high use levels and/or where the consumer's needs include roaming and/or
2 the use of text or other additional services, Verizon's prepaid plans are considerably more
3 expensive than its post-paid contract plans and are less desirable and objectively inferior for
4 users like these. And where no comparable or meaningful non-term, non-ETF alternatives are
5 presented, concluding, as Hausman does, that something is "preferred" by consumers simply
6 because consumers purchase it is illogical and wrong. Even if the consumer considers prepaid
7 and post-paid plans to be otherwise comparable, the higher price of the prepaid choice may well
8 exceed the consumer's budget constraint, and hence fall outside of the relevant set of alternatives
9 among which the consumer may choose. For all of these reasons, there is simply no basis to

1 infer or to conclude that the *fact* of widespread use of contract wireless plans with ETFs
2 “reveals” anything whatsoever as to actual consumer “preferences” as between plans with no
3 contract and those subject to ETFs.

4

5 **Plans offered by AirTouch in 1996 cannot be used as evidence of consumer revealed**
6 **preference in 2006.**

7

8 29. Hausman cites AirTouch Wireless’ experience in 1996 with “non-contract post pay”
9 plans.¹⁶ According to Hausman:

10

11 In 1996, in response to competitive pressures, Verizon Wireless’s legacy company
12 AirTouch introduced in its L.A. market non-contract post-pay price plans with
13 lower handset subsidies, higher monthly recurring charges, and no ETF that were
14 offered alongside price plans with term contract plans with free handsets, lower
15 monthly charges, and an ETF. Attracted by the lower up-front handset costs and
16 lower monthly service charges, customers overwhelmingly (approximately 95%)
17 chose the term contract option, revealing their willingness to commit to a carrier
18 for a fixed term in exchange for lower prices.¹⁷

19

20 Hausman provided no details as to the attributes of the AirTouch non-term and term/ETF plans
21 to which he referred. -----

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16. Hausman FCC Decl., at para. 43.

17. *Id.*

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14 ----- As I have

15 discussed above, revealed preference theory is very sensitive to time, and there is little to no
16 expectation that the contract preferences (or indeed, the economically possible contract prices)
17 then being offered to a niche group of consumers in the 1996 Los Angeles cellular market have
18 any general applicability today.

1 EFFECT OF ELIMINATION OF ETFs

2

3 **Hausman's assertion that the invalidation of certain ETF provisions would inflict harm to**
4 **consumers is speculative and baseless.**

5

6 30. I have reviewed Hausman's Declaration submitted in this proceeding as well as the
7 deposition he gave in the California class action proceeding, in which he purported to explain the
8 reasoning underlying the opinions he has put before the Commission. Based upon that review,
9 my understanding of the erroneous chain of reasoning upon which Hausman relies in rendering
10 this opinion is as follows:

11

12 (a) Hausman assumes that any result adverse to any of the carriers in the pending litigation
13 challenging ETFs will necessarily result in the prohibition of the ETFs for all carriers in
14 the market;

15

16 (b) He opines that the assumed abolition of all carriers' ETFs will inevitably reduce the
17 carriers' revenues and/or increase their costs of doing business, in two ways:

18

19 (i) by leaving the carrier no option but to pursue the collection of "actual damages"
20 from those subscribers (which, he opines, would be more expensive to the carrier
21 and would generate less money than is now produced by carriers' collection of
22 ETFs); and

23

1 (ii) by depriving carriers of the opportunity to recover their “upfront costs,” (consisting
2 mostly of advertising and commission expenses, but which also include handset
3 subsidies) over the full contract period, such that a greater portion of those “upfront
4 costs” would never be collected.

5
6 (c) Finally, Hausman concludes that because the market for cellphone service is
7 competitive, any carrier faced with the reduction in revenues or increase in costs (again
8 assuming that ETFs were abolished rather than modified to comport with state
9 contract/consumer protection limits) would inevitably have to increase its monthly
10 service prices and/or reduce its handset subsidies.

11
12 It is my opinion that each of the steps in the foregoing chain of reasoning is unsupportable, either
13 because there is no evidentiary or factual basis for it or because it is incorrect as a matter of
14 economics, or both.

15
16 **The assumption that the state court in California will necessarily eliminate all carriers’**
17 **ETFs is critical to Hausman’s opinion that wireless service prices will increase and/or**
18 **handset subsidies will decrease.**

19
20 31. There is no factual or logical basis for the assumption that the invalidation of particular
21 ETFs that have been contested in state litigation would necessarily result in the outright abolition
22 of all early termination fees by all carriers in the market. It is alleged in that litigation only that
23 certain carriers have imposed early termination fees in a manner inconsistent with state legal
24 guidelines for appropriate liquidated damages. Counsel advises that the elimination of ETFs for

1 all carriers in the market is not even a possible outcome, much less a likely outcome, in that
2 litigation. Among other things, one possible result of that litigation might be that early
3 termination fees could continue to be charged, but in a modified or restructured form. -----

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15 32. -----
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18. REDACTED.

19. REDACTED.

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6 33. More to the point, the assumption that a successful outcome in state litigation will
7 necessarily result in the abolition of all carriers' ETFs is unwarranted. It is my understanding
8 (based on the representations of counsel) that not all carriers have been sued in the California
9 litigation and that any judgment invalidating the disputed ETFs of carriers involved in that
10 litigation will not be binding upon (and thus will not affect the ETFs of) carriers that have not
11 been sued or against whom the case will not have gone to judgment. Furthermore, it is my
12 understanding that outright abrogation of ETFs is only one possible outcome of pending state
13 litigation and that the outcome may depend on the *reason* why an affected carrier's ETF is held
14 not to pass legal muster. For example, counsel advises that California Civil Code § 1671(d) (a
15 basis for certain claims in the California litigation) imposes certain *conditions* on liquidated
16 damages clauses in consumer contracts, *but does not prohibit all liquidated damages provisions*.
17 Since industry-wide elimination of ETFs, regardless of their specific terms, will *not* be a legal

20. REDACTED.

21. REDACTED

1 mandate resulting from pending litigation, the only scenario that could lead to this result would
2 be if those carriers unaffected by specific ETF litigation determined that they must do so in order
3 to remain competitive with those carriers that were under a specific mandate to eliminate their
4 ETFs. The likelihood of such a second-order effect is, at best, remote and its consequences, at
5 most, indirect.

6
7 34. In any event, there is a high degree of speculation in Hausman's conclusion that if all
8 carriers were to eliminate their ETFs, they would necessarily increase handset, monthly or usage
9 charges. ----- if only some, rather than all, carriers' ETFs
10 were to be abolished, the affected carriers would be constrained in their ability to raise their
11 monthly service or handset prices and would likely not be able to do so. As I shall explain below
12 at paras. 45-54, such "offsetting" rate increases are extremely unlikely in any event, even if all
13 ETFs were abolished. In any event, Hausman's conclusion that a judgment favorable to the

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20

1 **The conclusion that an abolition of all carriers' ETFs would necessarily reduce revenues or**
2 **increase costs is flawed**

3
4 35. Hausman's assertion that the prohibition of ETFs (if applied to all carriers) would
5 reduce carriers' revenues from collections or increase carrier costs by increasing the transaction
6 costs attributable to collections are speculative. In his October 2005 FCC ex parte declaration,
7 Hausman provides no data source to substantiate this conclusion.-----

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22. REDACTED.

23. REDACTED.

24. REDACTED

25. REDACTED.

1 36. Similarly, Hausman has been consistently vague with respect to the basis for his opinion
2 that it would be more difficult or expensive to enforce contracts without ETFs.²⁶ -----
3 -----
4 -----²⁷ -----, Hausman’s opinion – that carriers
5 would recover *less* money under an “actual damages” theory than with current actions to enforce
6 ETFs²⁸ – lacks any economic foundation. Hausman’s conclusion about increased costs to collect
7 actual damages is also pure conjecture. Just as he overstates carriers’ current success at
8 collecting the ETF, he speculates about a “more complex,” “more likely to be contested” process
9 for collecting damages in the absence of an ETF,²⁹ but provides no evidence that in any sense
10 quantifies these effects. -----
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13 -----³⁰
14

26. REDACTED.

27. REDACTED.

28. Hausman CA Decl., at paras. 30-1; see also, Hausman FCC Decl., at paras. 27-31.

29. Hausman FCC Decl., at para. 30.

30. REDACTED.

1 **Hausman’s opinions about how actual damages would be computed**
2

3 37. Hausman’s assessment of the complexity of determining an “actual damages” showing
4 in court is highly exaggerated, as is his estimation (as an economic matter) of the actual extent of
5 the damages involved. First, he expresses the view that damages would have to be calculated
6 individually for each subscriber, taking into account-specific factors, such as the subscriber’s
7 individual usage patterns, handset subsidy and the like.³¹ Second, Hausman claims that the
8 “actual damages” in an early termination case would include not only the number of months
9 remaining on a subscriber’s contract times the monthly charge less avoidable costs, but also, in
10 addition, the monthly average of any *additional* charges, including overages and other extra
11 fees.³² I disagree with both aspects of this opinion.
12

31. Hausman CA Decl., at paras. 32-33; *See also*, Hausman FCC Decl., at paras. 27-31.

32. *Id.* Pricing for post-paid wireless services typically involves three principal components – (1) nonrecurring handset and service activation charges, (2) monthly recurring service charges for network access and specific “airtime” usage allowances, and (3) usage-based overage and optional feature charges. Monthly recurring charges generally include a so-called “block-of-time” calling allowance, usually classifying calls into three distinct categories: (1) peak-period (“anytime”) minutes, (2) off-peak (“night” or “night/weekend”) minutes, and (3) “always free” minutes, such as for calls among family members under a “family share” or “family group” plan, or wireless-to-wireless calls between customers of the same carrier. In most cases, any allowance minutes that remain unused at the end of a given billing cycle are forfeited, although certain Cingular plans allow customers to “rollover” unused minutes into the next billing cycle. Overage charges apply for usage in excess of the monthly calling allowance. These normally carry a per-minute charge substantially in excess of the “average” per-minute level applicable to the customer’s calling plan, although certain Sprint plans impose overage charges in successive “block of time” increments. Depending upon the type of service, “roaming” charges for calls placed or received at locations outside of a designated “home service area” or at locations beyond the carrier’s own network, would also apply on a per-minute basis. Additional usage-based charges apply for optional services such as calls to directory assistance, text messaging, photo transmission, ring tones, and various content-based information services.

1 38. As to the damage calculation, I strongly disagree that Hausman’s approach properly
2 assesses the measure of harm to the wireless carrier *as an economic matter*.³³ In particular, I see
3 no economic justification for Hausman’s notion that a customer’s failure to incur overage and
4 other charges that were never embraced within the contract and which involve services that the
5 customer never agreed to purchase somehow constitute a recoverable “loss” to the carrier.

6
7 39. Hausman also speaks of losses to the carrier that arise where the carrier cannot fully
8 recover its “upfront costs” (“such as promotions that provide incentives for sales personnel to
9 provide high-quality assistance and costs for advertising” as well as handset subsidies³⁴) due to
10 early termination of service by a specific customer. However, only a portion of such upfront
11 costs, such as the handset subsidy, are actually specific to a particular customer. Other upfront
12 costs are incurred by the carrier irrespective of whether any particular customer – and specific-
13 ally the customer who discontinues service prior to the completion of the contract term – had
14 actually taken any service in the first place. Thus, while a handset subsidy – at least with respect
15 to the wholesale price that the carrier pays the manufacturer for the handset – would constitute a
16 customer-specific upfront cost, outlays for things like advertising, the costs of operating a retail
17 store, and the like, cannot be traced to the early termination customer and would have been
18 incurred by the carrier even if that customer had never purchased any service at all.

19

33. REDACTED.

34. Hausman FCC Decl., at para. 38.

1 **No showing of materiality**
2

3 40. Hausman’s conclusion that an elimination of ETFs would cause collection difficulties
4 that would reduce revenues or increase costs is premised upon the proposition that in a world
5 without ETFs, the carriers would not collect as much in damages from their early terminating
6 subscribers. But even if one were to accept the assumption that collections would be lower, one
7 would nevertheless have to pose the question, “How much lower?” Finding that difference
8 requires one to *subtract* the amount of “actual damages” that would be collected *if there were no*
9 *ETFs* from the amount of ETFs collected *now*. -----

10 -----
11 -----. To illustrate with a hypothetical example: If in aggregate only \$100 of ETFs are being
12 collected now, then the difference between the amount collected now and what would be
13 collected if there were no ETFs cannot exceed \$100.

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REDACTED

1 **Wireless carriers’ ability to recover their “up-front costs” of customer acquisition and**
2 **handset subsidies and earn substantial profit on their provision of wireless services neither**
3 **requires nor depends upon the existence of term contracts and ETFs.**
4

5 43. Hausman’s alternative theory for predicting potential economic harm based on the
6 assumed elimination of ETFs is equally unsupportable as a matter of economics and by the
7 CMRS carriers’ own experience “on the ground.” -----
8 -----
9 -----

10 -----⁴¹ This opinion is
11 indefensible for several reasons.
12

13 (a) First, Hausman conflates two distinct concepts – ETFs and term plans. His opinion
14 assumes that there could be no calling plans involving specific time commitments on
15 the part of the customer (“term plans”) without ETFs. But that assumption is not based
16 upon evidence or economic analysis – -----
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41. REDACTED.

42. REDACTED.

43. REDACTED.

1 (b) Furthermore, the very notion that term plans are necessary to recover up-front costs is
2 itself questionable. As I show, there are numerous examples throughout the economy of
3 products and services involving an initial or “platform” purchase followed by a
4 recurring stream of derivative purchases where the upfront cost of the “platform” is
5 heavily subsidized (like wireless handsets) *but without requiring the customer to enter*
6 *into any sort of term or volume purchase commitment with respect to the derivative*
7 *items.*

8
9 (c) There is compelling factual data indicating that average customer retention experience
10 of CMRS carriers extends well beyond the time span covered by term contracts. FCC
11 data put wireless industry churn rates in the range of 1.5% to 3.0% per month,⁴⁴ which
12 translate into annual churn of between 18% and 36%. According to the FCC, “Churn
13 refers to the number of customers an operator loses over a given period of time.”⁴⁵
14 “Churn,” for this purpose, includes customers switching carriers, but also includes
15 customers who discontinue their service for other reasons, such as relocation to an area
16 where the original carrier does not provide adequate (or any) service, death or disability,
17 or any other reason. The specific churn rates reported by the FCC can be translated into
18 an estimate of average customer service life with a carrier by simply taking the
19 algebraic reciprocal of the annual churn rate. Thus, an 18% annual churn rate implies
20 an average customer service life of roughly 5.5 years; a 36% annual churn rate implies a

44. *Tenth Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, WT Docket 05-71 (1005), (“*Tenth Wireless Competition Report*”), 20 FCC Rcd 15908, 15938, at para. 149.

45. *Id.*, at para. 148.

1 service life of about 2.8 years. Verizon recently reported its current churn experience at
2 only 1.2% per month,⁴⁶ i.e., about 14.4% annually, *which implies an average customer*
3 *service life for Verizon Wireless at just under seven years.* Customers are thus
4 remaining with Verizon and the other CMRS carriers well beyond the one- or two-year
5 terms of their contracts, assuring more than sufficient time for recovery of all up-front
6 costs and confirming the business merit of the platform pricing model.

7
8 (d) There is no earmarking or causal linkage between ETFs and “upfront costs.” All costs
9 are fungible. Up-front costs are no different from any other costs. Every business seeks
10 to recover its costs and earn a profit.

11
12 (e) Moreover, the same absence of any showing of materiality that undermines Hausman’s
13 opinion about collections also calls into question his opinion that a blanket prohibition
14 of ETFs would lead to less revenue or increased costs as a result of a delay in recovering
15 “upfront costs.” By definition, even if the effect exists, if it is immaterial, it will not
16 cause any effect on price.

17
18 **The conclusion that the elimination of ETFs would cause service prices to increase or**
19 **handset subsidies to decrease is speculative and indefensible; indeed, abolition of ETFs**
20 **could lead to lower prices rather than higher prices.**
21

22 44. Hausman contends, generally, (a) that handset subsidies are necessary as a means for
23 attracting customers to wireless services, (b) that early termination fees are necessary so as to

46. <http://investor.verizon.com/news/view.aspx?NewsID=718>

1 reduce or eliminate the “risk” being undertaken by the wireless carriers with respect to handset
2 subsidies and other up-front costs in the event that the customer does not fulfill a minimum term
3 commitment,⁴⁷ and (c) that in the absence of early termination fees wireless service prices would
4 necessarily be increased. The result, he claims, would be less favorable service offerings – at
5 least from the perspective of those customers who do fulfill their full contract and thus do not
6 incur an obligation to pay the ETF. While I certainly agree that subsidization of the handset and
7 other up-front customer acquisition costs (such as marketing, advertising, sales, commissions to
8 agents, account creation, etc.) are necessary in order to attract (or, perhaps more accurately, so as
9 not to *discourage*) subscriptions to wireless services, I strongly reject Hausman’s supposition
10 that the existence of term contracts and ETFs is a prerequisite for such subsidies and that handset
11 prices or recurring monthly and usage charges necessarily be higher in their absence. And, in
12 fact, prices could actually be lower.

13

47. Hausman CA Decl., at para. 48: “If the ETF is invalidated ... carriers will face a greater risk that up-front costs of acquiring subscribers will not be recovered ...”; *See also*, Hausman FCC Decl. at para. 40.

1 **Wireless carriers have adopted a “platform pricing” business model that contemplates the**
2 **subsidization of upfront costs with the shortfall to be recovered through subsequent**
3 **derivative purchases of platform-dependent products and services.**
4

5 45. Wireless service falls into a category of products/services that are sometimes referred to
6 as “platform products.” A “platform product” is one involving an initial (or “platform”)
7 purchase followed by a succession of additional or “derivative” purchases of complementary
8 products or services that specifically rely upon the “platform” and that require the customer to
9 have first purchased or otherwise have been furnished with the “platform.” In the case of
10 wireless service, the “platform” is the handset and the derivative purchases are the recurring
11 monthly access and usage. Each wireless carrier “sells” handsets to its customers that are
12 programmed by the carrier for activation only on its own network. By restricting the activation
13 of the handset “platform” to only that carrier’s service, the customer’s subsequent purchases of
14 wireless access and usage service will be confined to that same carrier’s network.

15
16 46. There are, in fact, numerous examples of “platform products” throughout the economy.
17 One classic example of a “platform product” is the Gillette razor, which only accepts blades
18 manufactured by Gillette. Others include Polaroid cameras that only accept Polaroid film, Sony
19 GameBoys and gaming software, Microsoft X-Box game platforms and compatible software, and
20 HP inkjet or laser printers and compatible ink and toner cartridges. A common characteristic of
21 such platform products is that the customer will typically confront a wider array of competitive
22 choices with respect to the initial platform purchase, but once the platform is selected, the
23 subsequent derivative purchases are confined to only those offered or licensed by the initial
24 platform provider. Through this process, the provider of the “platform” acquires market power

1 with respect to the derivative products and services associated therewith, and is thus able to
2 impose supracompetitive prices for those derivative products and services.

3

4 **Characteristics of Markets with Platform Products**

5

6 47. In each of the examples cited in the preceding paragraph, the restriction of the
7 subsequent derivative purchases to products or services compatible with the platform is
8 accomplished through the creation of *physical* interoperability limitations that have been
9 designed into the platform itself. However, the same *platform effect* can also be achieved for
10 other types of purchases where the customer's initial selection of a particular "platform" can
11 result in a stream of derivative transactions due simply to consumer inertia (i.e., reluctance to
12 switch service providers) even in the absence of any specific physical limitation. For example, to
13 induce customers to select a particular type of credit card, the issuer may offer a "sign-up bonus"
14 in the form of airline miles or cash. During the period of intense competition among long
15 distance carriers in the 1990s, it was not uncommon for prospective customers to be offered cash,
16 airline miles, or other incentives to switch to the provider's long distance service. AT&T, for
17 example, would mail checks of anywhere between \$10 and \$100, perhaps more, to prospective
18 customers who, upon cashing the check, would be switched to the AT&T long distance service.
19 MCI adopted a similar marketing approach for its long distance service, with the sign-up
20 incentive usually in the form of airline miles. Similar sign-up incentives are routinely offered by
21 cable TV companies both with respect to their video services and high-speed Internet access.
22 Banks also use this type of incentive scheme to encourage customers to open checking, loan or
23 other types of financial accounts. In each of these cases, the supplier incurs various up-front

1 customer acquisition costs (marketing, advertising, sales, commissions, promotional bonuses,
2 and subsidization of the platform product itself) in order to attract new customers. The supplier
3 will sacrifice profit – or more often actually sustain a loss – in order to encourage acceptance of
4 the “platform,” with the expectation that the shortfall will be more than recovered through the
5 higher profit levels associated with the subsequent, recurring, derivative purchases.

6
7 48. Expressed analytically, the initial platform and the derivative products/services are
8 *complementary* goods. All other things being equal, when two products or services, A and B, are
9 *complementary*, an increase(decrease) in the price of A will result in a decrease(increase) in the
10 demand for both A and B. Additionally, because the customer confronts a wider range of
11 alternatives for the initial platform purchase, the *own-price elasticity* of demand for the platform
12 is considerably greater (in absolute terms) than the own-price elasticity of the derivative
13 products/services, where the range of alternatives available to the consumer has been severely
14 curtailed. A profit-maximizing pricing strategy will recognize and respond to these different
15 demand elasticities. Specifically, the own-price elasticity associated with the initial or
16 “platform” product/service purchase is typically relatively high, because:

- 17
- 18 (a) the market demand for the platform product or service is inherently price-elastic, and/or
 - 19
 - 20 (b) there are multiple competing “platforms,” such that the demand confronting any one of
 - 21 them is relatively price-elastic, even if the overall market demand is not.
- 22

1 Once having purchased the initial “platform” product, the customer’s choice of vertical or
2 recurring purchases is restricted to a small set of compatible items. For example, once having
3 purchased a Polaroid camera, the customer must then purchase Polaroid film in order to use it.
4 Similarly, once having purchased a Hewlett-Packard (“HP”) inkjet printer, the purchaser must
5 buy compatible ink cartridges *from HP*. By restricting customer purchases in this manner, the
6 producer creates a relatively price inelastic demand condition for the after-purchase even if the
7 platform product itself confronts relatively high price elasticity. However, by reducing the price
8 of the platform, the producer will sell more units of both the platform and of the derivative
9 complementary products.

10

11 49. While economic theory ordinarily posits that producers will set the price of a product so
12 as to maximize profit derived therefrom, in the case of two *complementary* products the goal is to
13 maximize the *joint profit* available from both. If by reducing the price of A even to the point
14 where it is offered at a loss (relative to the cost of A) a sufficiently large increase in the demand
15 for A and for B is achieved, the pricing strategy will maximize the joint profit where the potential
16 profits from the sales of B are sufficient to more than offset the loss from below-cost pricing of
17 A. The goal is then to maximize *sales* of the platform (A) and price the after-product (B) so as to
18 maximize joint profit. In that regard, a recent *New York Times* article about inkjet printer ink
19 noted that an ink cartridge that HP sells for \$30 costs the company about \$3.50 to make.⁴⁸ Mark
20 V. Hurd, HP’s CEO, recently described the HP printing and imaging group’s business model as a

48. “New Printer Cartridge or a Refill? Either Way, Ink is Getting Cheaper,” *The New York Times*, February 4, 2006.

1 “demand creation model” that depends on selling more of the printers that consume a lot of ink
2 or toner.⁴⁹

3
4 50. Even where physical interoperability restrictions cannot be imposed (as is the case for
5 credit card and banking transactions), once having accepted the “platform” (i.e., the credit card or
6 the bank account), consumers will generally continue to use it for an indefinite period of time
7 even where they are not otherwise compelled by any term contract, minimum purchase contract,
8 or threat of an ETF, to do so. A bank in the Boston area, for example, was recently offering a
9 free Apple iPod for opening a new checking account, but only if the customer also agreed to have
10 his or her paycheck automatically deposited in the new account. Even without imposing any
11 minimum term requirement, this device would serve to deter consumer defection, since (a) the
12 account would then be receiving a regular infusion of new money (the salary check) against
13 which the depositor could draw funds, and (b) switching the electronic deposit to another bank
14 would involve some affirmative measures on the consumer’s part.

15

16 **Platform pricing is a widely-used business model, and neither relies upon nor requires**
17 **term plans and early termination fees.**

18

19 51. Importantly, the type of business model underlying each of these examples focuses upon
20 *aggregate profitability of the pricing strategy*, and not upon customer-by-customer risk
21 mitigation or loss prevention. Even though the initial “platform” sale may well result in a net
22 cash shortfall to the supplier (as a result of a subsidized platform product price, an up-front

49. “Profit Jumps 30% at Hewlett A Year into Chief’s Tenure,” *The New York Times*,
February 16, 2006.

1 incentive payment or promotion to the customer, and/or other customer acquisition outlays), the
2 model is premised upon the expectation that, *in the aggregate*, a sufficient number of customers
3 will collectively buy a sufficiently large amount of the complementary derivative product or
4 service as to make the pricing scheme profitable. *This type of pricing model neither expects nor*
5 *requires that each individual customer purchase a sufficient amount of the derivative*
6 *complementary product such that each individual customer will return a net profit to the supplier*
7 *or otherwise “make the supplier whole.”*

8
9 52. Consider the following example. Suppose that a hypothetical platform product (let’s
10 say an inkjet printer) costs the supplier \$300 to manufacture, market, distribute, and sell at retail,
11 including the retailer’s mark-up. However, at a \$300 price, only 1,000 units will be sold, but if
12 the price of the printer is cut to \$100, then 3,000 units will be sold. Suppose that ink cartridges
13 for that printer cost the manufacturer \$5 to produce. If the cartridges are priced at \$30, the
14 average cartridge consumption would be 20 units over the life of the printer, but at a \$20 price 25
15 cartridges would be consumed. The manufacturer considers two alternative pricing paradigms:
16 (1) Charge \$300 for the printer, and \$20 per cartridge; and (2) charge \$100 for the printer, and
17 \$30 per cartridge. The following table summarizes these two alternative business cases:

18

Table 1
 Hypothetical example of "demand creation" platform pricing model

		Case 1:	Case 2:
		No printer subsidy	Printer subsidized
1	Unit cost of printer (incl. normal retail mark-up)	\$300	\$300
2	Retail price of printer	\$300	\$100
3	Units sold at specified price	1,000	3,000
4	Net profit (loss) (L3 x (L2 - L1))	\$0	(\$200,000)
5	Unit cost of ink cartridge	\$5	\$5
6	Retail price of ink cartridge	\$20	\$30
7	Cartridge sales per printer	25	20
8	Total number of ink cartridges sold (L3 x L7)	25,000	60,000
9	Net profit on sale of ink (L8 x (L6 - L5))	\$375,000	\$1,500,000
10	Net profit from overall pricing strategy (L4 + L8)	\$375,000	\$1,300,000

53. From this hypothetical, we can draw several important conclusions.:

- (1) First, under the Case 2 (subsidized printer) model, a customer purchasing a printer for \$100 would be receiving the benefit of a \$200 subsidy. For the manufacturer to break-even, that customer would need to purchase eight (8) cartridges over the life of the printer at \$30 apiece, each one of which would create \$25 in profits. Importantly, however, *the overall profitability of Case 2 does not require that each and every customer purchase at least eight cartridges. All that matters is that overall the additional cartridge demand stimulated by placing those 2,000 additional printers in consumers' hands results in higher overall profit than under the Case 1 no-subsidy approach.*
- (2) Second, note that the decision as to how the cartridges should be priced (i.e., at \$20 or \$30) is largely independent of the decision as to whether or not to subsidize the printers.

1 Although the hypothetical shown in Table 1 uses a \$20 price for ink in the no-subsidy
2 Case 1 rather than the \$30 price used in Case 2, in fact the profitability of Case 1 would
3 actually be *increased* if the same \$30 ink price were charged there as well.⁵⁰ That is, at
4 a \$30 price, 20 cartridges per printer would be sold, resulting in \$500,000 in profit
5 rather than the \$375,000. This is because, in this hypothetical, the derivative demand
6 for ink by printer owners is relatively price-inelastic, such that even though fewer units
7 will be sold at \$30 than at \$20, overall revenue and profit will nevertheless be greater.

8
9 (3) Third, the source of the increased profitability under Case 2 *vis-a-vis* Case 1 is the high
10 complementary cross-price elasticity of demand for ink relative to the price of the
11 printer. Even though the lower price of the printers results in a shortfall with respect to
12 the printers themselves, the stimulation in the demand for ink – and the high profit
13 margin associated with the ink – easily overcomes the nominal “loss” on the printers.

14
15 54. Note that *none of the specific examples of platform pricing cited in paragraphs 52-53*
16 *above* – razors and blades, printers and ink, game controllers and game software, long distance
17 services, cable TV, credit cards, and bank accounts – *typically involve any sort of minimum*
18 *purchase or term commitment*. In each of these cases, the supplier relies upon the physical
19 interoperability restrictions, where present, and more generally upon consumer inertia, to assure
20 sufficient demand for the complementary derivative product or service as to overcome the up-
21 front shortfall resulting from the subsidization of the initial customer acquisition activity.

50. Because printers and ink are complementary, increasing the price of ink to \$30 under the no-subsidy Case 1 might have a small negative impact upon the demand for printers at the unsubsidized \$300 price. This effect, however, is likely to be small.

1 55. -----
2 -----
3 -----, there is no *a priori* or
4 other empirical basis to conclude that any other prices would be higher or otherwise be affected
5 by the absence of an ETF, and as such CTIA's expert's opinions to that effect are entirely
6 speculative. As was the case in the hypothetical discussed earlier, each individual pricing
7 element in a multi-element pricing paradigm confronts its own demand elasticity conditions and,
8 as such, will be set (presumably to maximize profits) in light of those conditions. Unless the
9 existence of the ETF in some consequential way alters or affects the own- and cross-price
10 elasticities associated with handsets, monthly wireless network access, airtime usage, or other
11 usage elements (e.g., text messaging, photos, ringtones, etc.), there is no reason why any of these
12 would be different or would be set differently based upon the presence or absence of an ETF.⁵¹

13
14 **In view of the widespread use of a platform pricing business model by CMRS carriers,**
15 **early termination by individual customers does not create any "economic loss" for the**
16 **carrier**

17
18 56. As I have explained at Paragraph 51, *supra*, the platform pricing model being used by
19 the carriers neither expects nor requires that each individual customer purchase a sufficient
20 amount of the derivative complementary product such that each individual customer will return a

51. "Own-price elasticity" refers to the effect of a change in price of a good (product A) upon the demand for that same good. "Cross-price elasticity" refers to the effect of a change in the price of one good (product A) upon the demand for another good (product B). If A and B are complementary goods, the cross-price elasticity will be negative; if they are substitutes, the cross-price elasticity will be positive. Handsets and wireless usage are complementary goods; thus, a reduction in the price of handsets will result in increased demand both for handsets as well as for wireless minutes.

1 net profit to the supplier. All that is required or expected is that, in the aggregate, sales of the
2 derivative product – wireless access and usage in this case – will produce sufficient profit margin
3 so as to more than offset the aggregate shortfall arising from handset subsidies and other up-front
4 customer acquisition costs. This type of pricing model is expressly intended to create demand
5 for the derivative product, demand that *would not otherwise exist* absent the subsidization of the
6 initial platform purchase. Assuming that the various charges being presented to subscribers – the
7 initial handset purchase, the monthly access fee, and per-minute airtime and other usage charges
8 – have all been properly structured so as to maximize profits overall, the carriers do not sustain
9 any economic loss with respect to the small percentage of customers who do not fulfill their term
10 commitment. Viewed in the context of the overall platform pricing paradigm, the economic
11 losses arising from early termination of any particular subscriber’s contract – voluntary or
12 involuntary – are zero, and the “liquidated damages” represented by any ETF that is greater than
13 zero will thus necessarily overstate any such economic loss.

14

15 **Hausman’s theory of constant profits (-----) is premised upon the presence**
16 **of a “perfectly competitive” market with few or no barrier to entry, conditions that simply**
17 **do not exist in the case of spectrum-limited wireless services.**

18

19 57. In claiming that elimination of ETFs would somehow cause wireless carriers to
20 implement offsetting increase in various charges (handsets, monthly service charges, and usage
21 fees), Hausman relies upon what might be described as a “theory of constant profits,” i.e., that in
22 “competitive” markets profits are in equilibrium brought to some fixed “competitive profit
23 level.” Under this theory, any increase in costs or decrease in revenues would inevitably be
24 offset, dollar-for-dollar, by an increase in the charges imposed upon subscribers. -----

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10

11 58. This notion of fixed aggregate revenue might perhaps have been valid under a pricing
12 regime subject to so-called “cost-plus” or “rate-of-return” regulation, a form of regulation that
13 had long been applied in setting public utility rates, but which (at least in telecommunications)
14 has been all but eliminated. A certain “revenue requirement” would first be established, and then
15 “spread” across all of the utility’s services and pricing elements. Under this paradigm, raising
16 the price of any one rate element would operate to reduce the “residual” revenue requirement
17 applicable to the remaining service elements. Wireless services are not subject to any form of
18 price regulation, rate of return or otherwise. There is no fixed “revenue requirement” or other
19 immutable revenue target. The interdependence of individual pricing elements is driven by own-

52. REDACTED.

1 and cross-price elasticities, market segmentation, and profit-maximization objectives, and not by
2 the need to achieve some fixed or predetermined revenue level.

3

4 59. Hausman implies that this same fixed profit level outcome will arise in highly
5 competitive markets, which he claims is precisely the type of market that exists for wireless
6 services.⁵³ Economic theory holds that, in *perfectly competitive* markets, when firms earn
7 “excess” profits, others enter the market until prices are ultimately bid down to the point where
8 excess or “monopoly” profits are eliminated. This condition only exists under the theoretical
9 “perfectly competitive” market structure. Where competition is less than “perfect,” the
10 incumbents (i.e., those already in the market) will be able to charge prices that are higher than
11 cost.⁵⁴ Perfect competition, however, requires that the ability of firms to enter (and to exit) the
12 market is both rapid and costless. Where “barriers to entry” are present, incumbents can continue
13 to charge excessive prices and earn supracompetitive profits until entry actually takes place.

14

15 60. There are, in fact, enormous barriers to entry into the *facilities-based* wireless service
16 market. In addition to the substantial capital investment and lengthy construction times involved
17 in building out a wireless network, there is also the matter of electromagnetic (radio) spectrum,
18 which is licensed by the FCC. In 1993, Congress authorized the FCC to auction spectrum for
19 wireless services to the highest bidder, with the proceeds to go to the US Treasury.⁵⁵ The FCC

53. Hausman FCC Decl., at para. 42.

54. See, e.g., Rochet, Jean-Charles and Tirole, Jean, “Two-Sided Markets: An Overview”
March 12, 2004, at 7. Available at: http://faculty.haas.berkeley.edu/hermalin/rochet_tirole.pdf.

55. *Omnibus Budget Reconciliation Act of 1993*, Pub. L. No. 103-66, Title VI § 6002, 107
(continued...)

1 recently put the value of the nationwide licenses for two five-MHz blocks of spectrum (10 MHz
2 total), being granted to Nextel, at \$4.8 billion.⁵⁶ And Hausman, for example, notes that in
3 November 2004 Verizon had spent \$3.0-billion to acquire spectrum in just 23 US markets.⁵⁷
4 Spectrum is in limited supply, and when it has all been allocated (via auction or otherwise)
5 within a given frequency band, the only means by which a new entrant could acquire spectrum is
6 to purchase it from an incumbent. Short of that, entry would be precluded.⁵⁸

7
8 61. The basis for Hausman's contention that the wireless market is "competitive" is a recent
9 FCC annual report on wireless communications: "[T]he FCC has found that 'there is effective
10 competition in the CMRS [wireless] marketplace.'"⁵⁹ Hausman is referring to the *Ninth Report*
11 on wireless competition, which was issued in September 2004.⁶⁰ The *Tenth Report*, issued in

55. (...continued)
Stat. 312, 387-397 (1993); 47 U.S.C. § 309.

56. *Tenth Wireless Competition Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, 20 FCC Rcd 15908, 15938.

57. Hausman FCC Decl., at para. 19 and footnote 22.

58. The FCC periodically opens up additional frequencies for Commercial Mobile Radio Service ("CMRS") use, such as in the recently-introduced 3 GHz band. Each frequency range has its own unique transmission propagation characteristics, such that development of a higher frequency band may involve a more costly and more complex cell site and interconnection infrastructure, and may produce services of varying service quality levels. These and other factors influence carriers' willingness-to-pay as well as the ultimate competitiveness of the services created therefrom.

59. Hausman FCC Decl., at para. 11.

60. *Ninth Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, WT Docket 04-111, ("*Ninth Wireless Competition Report*"), 19 FCC Rcd 20597.

1 September 2005, contains a similar finding, but with several caveats.⁶¹ These caveats serve in
2 invalidate Dr. Hausman’s conflation of “perfect competition” where prices would not contain
3 economic rents, and -----
4 -----
5 -----
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7 -----.

8
9 62. Indeed, the FCC has never claimed that the level of competition in the wireless market
10 approaches “perfect competition.” FCC Commissioner Michael J. Copps, in his concurring
11 statement to the *Tenth Report*, notes that “we still fail to define ‘effective competition’ – and this
12 limits the ability of the Commission and the Congress to rely on our results.”⁶² And the *Tenth*
13 *Report* includes the following observation with respect to the nature of effective competition of
14 the US wireless market:

15
16 191. One of the reasons revenue per minute is higher in Western Europe than in the
17 United States is that the calling party pays system used throughout Western Europe
18 tends to produce higher mobile termination prices, and consequently higher charges for
19 calls to mobile phones, than the mobile party pays system used in the United States.
20 Apart from the effects of calling party pays, however, this difference in the pricing of
21 mobile telephone service is widely attributed to a less aggressive competitive
22 environment in Western European mobile markets for services paid for by mobile
23 subscribers. Accordingly, the results of this international comparison can be interpreted

61. *Tenth Wireless Competition Report*, at 20 FCC Rcd 15908, 15977.

62. *Id.*, Copps statement, at 20 FCC Rcd 15908, 16014.

1 as evidence that *the U.S. mobile market is effectively competitive relative to mobile*
2 *markets in Western Europe and also Japan.*⁶³
3

4 63. The barrier to entry created by the scarcity of spectrum is responsible, at least in part,
5 for the lack of perfect competition and thus for the ability of a wireless carrier to price end user
6 services above cost. Since a wireless carrier relies upon its spectrum to provide service, the
7 scarcity of available spectrum is in large part responsible for the high earnings levels available to
8 wireless carriers.⁶⁴ A carrier's willingness to pay a given price for spectrum is directly related to
9 its expectations as to the stream of profits that can be derived therefrom going into the future.
10 The value of wireless spectrum is extremely high, indicating a high level of expected profits
11 (revenue minus cost) that are anticipated to be available from the ongoing provision of wireless
12 services.
13

14 64. Were [all] carriers to experience a decline in average revenues following the elimination
15 of ETFs – or even the elimination of all term contracts – Hausman claims that the carriers would
16 increase prices. For example, Hausman states that, “[w]ithout ETFs, overall prices would be

63. *Id.*, at para. 191, footnote references omitted, emphasis supplied. As discussed above, Hausman inappropriately seeks to ascribe the higher wireless prices he claims to exist in Germany *vis-a-vis* the US as evidence of the effects of no ETFs. Hausman CA Decl., at para. 8. The FCC, however, appears to ascribe this condition to less competition in European wireless markets, and makes no mention of any effects of ETFs on wireless prices.

64. Verizon Wireless recently reported its fourth-quarter 2005 results as follows: “Industry-record 2.0 million net customer additions, up 20.5 percent from fourth quarter 2004; 51.3 million total customers, up 17.2 percent from 2004; repeat record-low quarterly churn (customer turnover) of 1.2 percent; total revenues up 18.3 percent from fourth quarter 2004; *EBITDA margin (non-GAAP) of 46.8 percent.*” <http://investor.verizon.com/news/view.aspx?NewsID=718>. Emphasis supplied.

1 higher, and the rate structures would tend to transfer costs to consumers.”⁶⁵ However, there is no
2 economic requirement that this two year, or shorter, stream of revenue remain constant. In the
3 event of a measurable decrease in revenue levels from the elimination of the ETF, the more likely
4 market response (if any were to occur) would be some decrease in the value of spectrum owned
5 by the carriers arising from reduced profits, rather than a mandatory price increase.

6
7 65. The reason that a pricing response is less likely than an adjustment to spectrum value is
8 because carriers have already set each of their various pricing elements so as to accommodate
9 their market segmentation strategies and to maximize their profits. As I mentioned earlier, in the
10 absence of rate-of-return regulation or perfect competition, individual pricing elements are set
11 based upon own- and cross-price elasticities and profit-maximization objectives. Economic
12 literature confirms that pricing of platforms will be determined by the relative demand elasticities
13 of substitute and complementary products.⁶⁶

14
15 66. If, for example, increasing the number of night and weekend minutes that a customer
16 receives in her wireless bundle increases her likelihood of using her cell phone, then this change
17 will increase both the revenues that a carrier receives from other carriers for terminating calls to
18 that customer, and may increase her off-peak minutes, voicemail usage, or other services for
19 which the carrier could obtain additional revenues. Conversely, increasing the consumer’s per-
20 minute charge, or decreasing the number of included minutes in an effort to replace the “lost”
21 ETF revenue, could well have precisely the opposite effect, resulting in less use of her wireless

65. Hausman FCC Decl., at para. 42.

66. Rochet-Tirole (2004), at 34.

1 phone. Thus, if the wireless carrier were to respond as Hausman proposes – by increasing price –
2 it would forego *additional* revenue, as customers responded to the increased prices by
3 suppressing their wireless use.

4

5 **Eliminating ETFs will likely result in increased competition and reduced prices**
6

7 67. In fact, it is entirely possible – indeed, even *likely* – that elimination of ETFs would
8 result in *lower*, not higher, wireless prices. One of the consequences of confronting customers
9 with ETFs is the discouragement of churn – i.e., changing service providers. To the extent that
10 customers are reluctant to terminate their service prior to the completion of their contract term,
11 they are *unaddressable* by other service providers. Eliminating term contracts and ETFs could
12 thus actually increase inter-carrier competition by reducing the costs of switching carriers that
13 individual consumers would otherwise confront. This would, in turn, push prices down, not up.
14 Indeed, the FCC made precisely this finding in its *Tenth Report* on wireless competition:

15

16 145. A mobile carrier can exercise market power only to the extent that mobile
17 subscribers do not respond to price increases or other adverse competitive effects. If, to
18 the contrary, enough consumers are sufficiently well-informed to take prices and other
19 non-price factors into account when choosing their service provider, and likewise, if
20 enough consumers have the ability and propensity to switch service providers in
21 response to an increase in price or other harmful conduct, then the carrier will have an
22 incentive to compete on price and non-price factors. Consumer behavior will be more
23 effective in constraining market power when the transaction costs subscribers incur in
24 choosing and switching carriers are low. Transaction costs depend on, among other
25 factors, subscribers' access to and ability to use information, and costs and barriers to
26 switching carriers.⁶⁷

27

67. *Tenth Wireless Competition Report*, 20 FCC Rcd 15908, 15962.

1 Moreover, it is not at all clear that an industry-wide elimination of ETFs, were that to occur,
2 would be detrimental to all of the carriers. Customers will typically switch wireless carriers
3 either because they are dissatisfied with their existing carrier's service, or because they are
4 offered a better price. To the extent that a given carrier is reputed to be providing better-than-
5 average service, elimination of ETFs would actually *benefit* that carrier by making it easier for
6 would-be customers to leave their unsatisfactory service provider. -----

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16
17 68. Even without early termination fees, and as I have previously explained at paras. 36 *et*
18 *seq.*, customer inertia will still operate to minimize churn. Factors contributing to consumer
19 inertia are the effort associated with learning to use a new and unfamiliar handset, dealing with
20 final billing issues, and other transaction-related tasks. The fact that numerous platform-type
21 pricing strategies used by providers of the diverse range of products and services cited above do

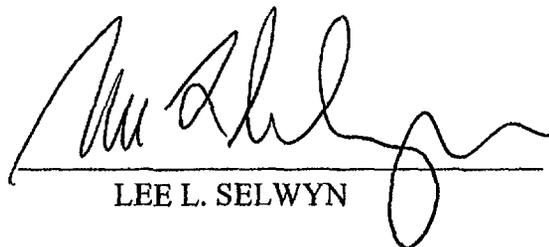
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- 1 not rely upon or require term contracts or minimum purchase commitments confirms that the
- 2 same type of pricing could be successfully and profitably implemented for wireless services
- 3 without contracts, ETFs, or increased handset and services prices.
- 4

VERIFICATION

The foregoing statements are true and correct to the best of my knowledge, information and belief.



LEE L. SELWYN

REDACTED

Attachment 1
Statement of Qualifications
LEE L. SELWYN

Statement of Qualifications

LEE L. SELWYN

Dr. Lee L. Selwyn has been actively involved in the telecommunications field for more than thirty-five years, and is an internationally recognized authority on telecommunications regulation, economics and public policy. Dr. Selwyn founded the firm of Economics and Technology, Inc. in 1972, and has served as its President since that date. He received his Ph.D. degree from the Alfred P. Sloan School of Management at the Massachusetts Institute of Technology. He also holds a Master of Science degree in Industrial Management from MIT and a Bachelor of Arts degree with honors in Economics from Queens College of the City University of New York.

Dr. Selwyn has testified as an expert on rate design, service cost analysis, form of regulation, and other telecommunications policy issues in telecommunications regulatory proceedings before some forty state commissions, the Federal Communications Commission and the Canadian Radio-television and Telecommunications Commission, among others. He has appeared as a witness on behalf of commercial organizations, non-profit institutions, as well as local, state and federal government authorities responsible for telecommunications regulation and consumer advocacy.

He has served or is now serving as a consultant to numerous state utilities commissions including those in Arizona, Minnesota, Kansas, Kentucky, the District of Columbia, Connecticut, California, Delaware, Maine, Massachusetts, New Hampshire, Vermont, New Mexico, Wisconsin and Washington State, the Office of Telecommunications Policy (Executive Office of the President), the National Telecommunications and Information Administration, the Federal Communications Commission, the Canadian Radio-television and Telecommunications Commission, the United Kingdom Office of Telecommunications, and the Secretaria de Comunicaciones y Transportes of the Republic of Mexico. He has also served as an advisor on telecommunications regulatory matters to the International Communications Association and the Ad Hoc Telecommunications Users Committee, as well as to a number of major corporate telecommunications users, information services providers, paging and cellular carriers, and specialized access services carriers.

Dr. Selwyn has presented testimony as an invited witness before the U.S. House of Representatives Subcommittee on Telecommunications, Consumer Protection and Finance and before the U.S. Senate Judiciary Committee, on subjects dealing with restructuring and deregulation of portions of the telecommunications industry.

In 1970, he was awarded a Post-Doctoral Research Grant in Public Utility Economics under a program sponsored by the American Telephone and Telegraph Company, to conduct research on the economic effects of telephone rate structures upon the computer time sharing industry. This work was conducted at Harvard University's Program on Technology and Society, where he was appointed as a Research Associate. Dr. Selwyn was also a member of the faculty at the College of Business Administration at Boston University from 1968 until 1973, where he taught courses in economics, finance and management information systems.

Statement of Qualifications – Lee L. Selwyn

Dr. Selwyn has been an invited speaker at numerous seminars and conferences on telecommunications regulation and policy, including meetings and workshops sponsored by the National Telecommunications and Information Administration, the National Association of Regulatory Utility Commissioners, the U.S. General Services Administration, the Institute of Public Utilities at Michigan State University, the National Regulatory Research Institute at Ohio State University, the Harvard University Program on Information Resources Policy, the Columbia University Institute for Tele-Information, the International Communications Association, the Telecommunications Association, the Western Conference of Public Service Commissioners, at the New England, Mid-America, Southern and Western regional PUC/PSC conferences, as well as at numerous conferences and workshops sponsored by individual regulatory agencies.

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