Mr. Tomasofsky: That was very thought-provoking. I had a question on how you were talking about things. What would happen in the television subscription model where we are paying by watching commercials, if the technology comes along where we can press a button and fast forward through the commercials, what does that do to the rest of everything else?

Mr. Farrell: If you can very easily evade payment, then that can threaten the payment model. You might have thought that might contribute to the shift in payment mechanism toward subscription content—especially now remote controls make fast-forwarding even easier. But, after all these years of progress in fast-forwarding through ads, we still see quite a lot of ad financing of video content. Apparently, it was not a devastating problem.

As a side note, I’ve read that the initial response from the studios to the development of recording and potentially fast-forwarding devices was not so much they were worried about fast-forwarding. They were more worried about time shifting—you would watch the ad, but perhaps a day or a week later. They feared that some of their advertisers would worry about when—rather than whether—you would watch the ad. It puzzles me a bit, because my general sense is that with most television ads it would not matter that much if you viewed them a day or a week later.

Mr. Sullivan: Your mosquito problem is a very useful construct to understand this. I do think it focuses mostly on the transaction costs side. I wonder if you have had any thoughts about the risk side of this as well? When you look at, for example, the iTunes transaction, you buy a song, you get a 99 cent charge on your credit card. You buy another song and you have another 99 cent transaction fee. So they manage to deal with the mosquito problem with each of the 99 cent transactions.

What I am wondering is, Now they are getting that transaction charge for each one of those payments, why do they not just accumulate those over the course
of a month and then maybe put a $10 charge on it? Maybe there is some risk side
to that and there may be other issues that make the decisions to do this bundling
more tied to some other aspects of risk.

**Mr. Farrell:** I do not know anything about Apple’s relationship with its cred-
it-card acquirers. In principle they might or might not have a per-transaction fee
that would encourage them to accumulate charges. You could even imagine that
they do accumulate charges but make it look otherwise to the end user. The key
thing about the payment model is not what it does to Apple’s relationship with its
acquirers, but the effect on what the consumer has to do: he doesn’t have to type
in a credit card number and a billing address every time he wants to download a
song. As I commented about advertising, the back-office operations between large
commercial entities can often be made a lot more cost-efficient than can be done at
the consumer end of things where there is a lot of literal or metaphorical fumbling
in the wallet.

**Mr. Morrison:** I did have a question about your take and understanding of
the pay-for-view ad, where there has been some very interesting innovation of
where people are going to an ATM. Instead of paying an ATM fee, they watch an
ad for a specific merchant or advertiser and, instead of paying that fee, the ATM
pays for it itself. The other piece of that, there is a company called Jingit that does
the same thing, except they actually pay people to watch ads. So it has a very di-
rected focus on the ad and then they pay people to watch it.

**Mr. Farrell:** It might depend when the ad is selected. Some people might
see a privacy problem if the ad is targeted to you once you have already identified
yourself. I think that would be different if it were simply the ad that is shown at
this ATM today and you press a button first to watch the ad, rather than pay the
ATM fee.

Other than that, I would say it is an experimental business model. It might
work, it might not. I recall back when long-distance telephone calls were a little
bit expensive, there was a company that tried providing free long distance in return
for listening to an ad on the telephone before they put you through. I don’t think
that particularly went anywhere, but it was an interesting experiment worth trying.

**Ms. Hughes:** The report that came out on Monday spends a good deal of
time talking about not tracking. There is also a significant impulse coming out of
the European Union to not tracking or even opting in. What are your thoughts
about not tracking or opting in for an audience that is going to be doing payments
providing in a variety of different spaces? It is not just Internet. It is lots of things.

**Mr. Farrell:** Probably I should stress again here that I am not speaking for the
FTC. The Commission’s report said what it believes. The report specifically said
that it is applicable offline, as well as online. I think it also was not intended to get
at tracking of the kind that you might need for audit and security purposes. What
the report is intended to do is to say the default should be “Do not track a con-
sumer around the Internet, so as to be able to send more targeted ads or otherwise
make money off the consumer, without appropriate consent or in the context of
the transaction's circumstances.” So it is a somewhat nuanced message, but basic-
ally the idea is this is a practice that is threatening to privacy and people should
not do it, without proper consent.

Mr. Salmon: I completely agree with you about the positive externalities of
bringing down transactions costs. Can you talk a little bit about what you have
seen in terms of where transactions costs have gone over the past years or decades?
It seems to me they actually have been going up rather than down. Also, can you
tell us whether you think there is any real hope for them to be coming down in the
future and, if so, where that hope might be coming from.

Mr. Farrell: I do not have a particularly privileged window on those ques-
tions. My sense is that transactions costs have been coming down, in part through
innovation. Yet certainly dealing with a retailer online that you have not dealt with
before or that has not hung on to your information involves a good deal of typing
in information. That, in itself, takes longer and is more hassle than presenting a
card, or for that matter cash, in a bricks-and-mortar establishment—where there
has also been transaction-cost innovation. Of course, getting to the bricks-and-
mortar establishment is part of the transactions cost too.

But I think the basic point remains: there is a really important agenda of get-
ting those costs down further and that is what you payment industry guys, I hope,
are doing.

Ms. Garner: Back in June 2011, Consumer Reports came out with an article
that talked about fraud pretty significantly and mentioned the cost for the issuing
community in the United States to move to chip and PIN was somewhere around
$2.85 billion, compared with $2.4 billion in fraud losses. What implications does
that have for the security of card payments going forward? In particular, as we look
at mobile and we look to move some of these products we have today, a credit card
as we know it, in the mobile wallet?

Mr. Farrell: On the mobile aspect, I will defer comment, because the FTC is
having its workshop in the near future. In general terms, why not chip and PIN
in the United States? I don't know a lot about this; there have been conflicting
accounts. As long as the industry, rather than final consumers, is bearing the costs
for fraud, you would think they would have an incentive to introduce a fraud-pre-
vention technology if it made sense. But there is always the possibility of incentive
failures at various points along the line.