Halting the Accounting Rate Rip-Off

Remarks of
  Robert Cohen, Peter Cowhey and Erik R. Olbeter
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DR. ROBERT COHEN: Today we are going to address two aspects of the current
debate regarding settlement rates. I will begin by discussing what happens in
domestic markets after liberalization and the entry of foreign carriers, and how
that is related to accounting rates.

My primary focus is price squeezes. A price squeeze would occur, for example,
if a foreign carrier came into the U.S. telecommunications market and
dramatically dropped the price it charges for calls back to its home country. This
could have the effect of putting a price squeeze on the U.S. carriers that compete
to send calls to that market, by greatly reducing the prices and, also, the
profitability on those routes.

Discussion of this particular mechanism or phenomenon has not been very
prominent in the debate. My paper points out that the United States has a history
of price squeezes in other industries, and we should be mindful that such history
could be repeated in the telecommunications industry, particularly with
liberalization and the opening up of our market to foreign carriers.

My paper presents historical case studies of price squeezes in the U.S. domestic
market, involving the tobacco, steel, aluminum, and telecommunications
industries. These cases studies illustrate how price squeezes occur, what kind of
effects they have, and what final outcomes can be.

Most cases of domestic price squeezes in the United States have taken place
within an oligopolistic pattern of competition, where there have been fairly
stable prices and market shares. Oligopolistic companies, either desiring to enter
another area of the market or desiring to discipline some newer competitor,
would drop the prices of certain products dramatically, so that they could
undercut the profitability of their main competitors. Eventually, after suffering
losses on their sales over a protracted period of time, those competitors that
lacked sufficient resources were forced from the market.

The parallel I draw here is that a substantial foreign carrier, from a developing
country that maintains inequitable accounting settlement rates, could pass the
ECO test, come into the United States market, dramatically drop their rates for
calls back to their home country - say, from something around thirty-five cents
down to nine, ten, or twelve cents - and really put a squeeze on the other
international carriers in the United States.

It is true that the ECO test requires new entrants to face competition in their
home markets, but it is unclear that the competition rules would necessarily be
carefully enforced. We could have a situation like the one in Britain, where the
main carrier, British Telecom, still controls about ninety-six percent of the local
traffic.
My paper argues that history documents numerous occurrences of price squeeze behavior in other U.S. sectors, so we should be prepared to deal with it in the telecommunications sector. In addition to a test for entry into the U.S. market, in addition to benchmarking rules, we ought to have rules in place to combat anticompetitive behavior in the U.S. market after the entry of foreign carriers. I suggest additional reporting requirements the FCC might utilize to monitor and assess whether there are price squeezes potentially being put in place. That gives you a pretty quick summary of what the paper is all about.

DR. PETER COWHEY: Thank you. I am delighted to have the opportunity to be here today. I would like to spend a little time discussing the reform of the international telecom services market, as we see it at the FCC, particularly in terms of our accounting rate initiatives. Then I will comment briefly on some of Bob's remarks, and I think we should leave maximum time for questions from the floor.

We are all agreed that there is something wrong about the structure of competition in the international telecommunications services market. The numbers about marketplace performance reflect that.

The cost of the average long-distance minute in the United States is about sixteen cents a minute. In terms of bulk sale of long distance for, let's say, the inter-exchange carrier selling long-distance traffic carriage services to the Bell Operating Companies, the numbers are in the range of two to three cents a minute. That gives you an idea of the structure of price competition in the U.S. domestic long-distance market.

We also know that international communications services are fundamentally way overpriced. The average price of an international long-distance minute from the United States to the rest of the world is now over ninety cents a minute.

Why the difference between sixteen cents and over ninety cents a minute? There is no good economic explanation. Fundamentally, the cost structure of the calls is the same. There may be some differences, for example, in the efficiency of the foreign network terminating the call, compared to the U.S. network. There are also some variations imposed by the effects of time-of-day on routing and density of traffic on a route. However, within some rough approximation, there is no fundamental difference between the cost of a domestic long-distance call and the cost of an international call; the existing price structure reflects a cost difference that should not be there.

So, what is causing the inefficiency of the market?
There are several reasons. One reason is the distortions imposed by high settlement rates, and another is the problem imposed by the traditional structure of competition in the marketplace. I would like to address those in reverse order, first talking about the structure of competition and then talking about the narrower question of accounting rates, and settlement rates, as a policy matter.

I am normally a University of California professor. If you took a graduate course from me and I said, "explain to me what an accounting rate is and what a settlement rate is," could you do that in ten seconds? How many people here would pass the exam?

I see a few waving hands. I won't call your bluff. If it is any consolation, most of the people at the FCC would not pass the test, because this is an area that has been made so obscure and arcane that it defies casual inspection and thus shelters a purely irrational price-and-cost structure. On the other hand, it has meant unlimited grants for me in my years as an academic - as one of the few people who have decodified the subject - and it has also meant great fun when making public policy, because nobody else wants to pay any attention to it.

Now, let me briefly explain how the world was organized. This goes back to the 1840s and 1850s, when, for example, France and Germany were setting up telegraph service between the two countries. A telegram traveling from Munich to Paris would be transmitted to the border between France and Germany, written down in the German telegraph office, hand-delivered across the border to the French telegraph office, and then transmitted to Paris.

Well, this was goofy, even in the 1850s. Countries eventually improved the efficiency by dispensing with the hand delivery and agreeing that any telegraph message between two countries required each to provide half of the telegraph transmission service. They agreed that it necessarily had to be done that way and that they would split revenues from the service according to an official transfer price, which became the "accounting rate."

So, France and Germany's telephone administrations would negotiate an official price for all international telegraph traffic between France and Germany, and then they would negotiate a split in the revenue on every telegram - normally fifty-fifty, a logical thing to do.

That was the birth of the accounting rate system. This was a far less auspicious moment for civilization than was the "Birth of the Blues," or other moments we might sing about, but it created a price and cost structure that still lives with us today, in a world of digital electronics.

To add one more piece of arcane knowledge, the accounting rate system uses the term "settlement rate," which is really the key economic term here. In virtually
every case around the world, the settlement rate is exactly one-half of the accounting rate, because, in theory, all telephone call revenues are split fifty-fifty at this official rate.

When you divide the revenues fifty-fifty, you are each entitled to half of it - right? The half that you have to pay the other side for the delivery of a telegram or a telephone call is the settlement rate. So, the settlement rate today is what U.S. telephone carriers pay a foreign telephone carrier to finish the delivery of a call from the United States to the foreign country.

Now, if the United States sent one minute of telephone traffic to another country for every one minute it got back, it would be an even trade. In the end, it would amount to a wash: each would owe identical revenue to the other, and no money would change hands.

In actual practice, however, the United States sends far more minutes of telephone calls to the rest of the world than the rest of the world sends to us. As a consequence, our U.S. carriers end up being billed for a net settlement payment to the rest of the world.

Because they send more minutes to the rest of the world than they get back, therefore, the U.S. carriers - or, in most cases, their American customers - pay money to the rest of the world. How much do they pay? This year, it will be roughly $5.5 billion, and it is growing each year.

I will move on now to discuss a second problem that is interfering with the efficiency of the market - namely, the structure of competition in the marketplace.

In economic terms, I am an old-fashioned believer in the economic theory that says a trade deficit, in itself, is neither good nor bad. It is just simply there. Having the U.S. place more telephone calls to the rest of the world than we receive is not a bad thing, in itself. If we have to pay for that, on net, that is not a bad thing either.

What is bad is that the price we are paying to terminate those telephone calls to the rest of the world has no relationship to cost. It is a transfer payment - reflecting an arcane arrangement for the delivery of telephone services - and the average settlement rate paid by the United States for a minute of international traffic is now roughly thirty-six cents a minute.

Think about it: I started this discourse by saying that a large bulk buyer of long-distance services in the U.S. market today can get two-and-a-half cents a minute, and that there is no fundamental difference in the cost structure between
domestic long-distance calls and international calls. Yet, our average settlement rate with the world is thirty-six cents a minute.

This would suggest there is something wrong. It is an example of pure economic rent in the prices being charged to U.S. carriers for the termination of international telephone calls.

Having said that, however, there would still be a problem in the performance of the market even if accounting rates were closer to actual costs. Remember, the average revenue for an international long-distance call is ninety cents a minute. What is the problem?

We believe that a good deal of the problem is the structure of the market today - the way it is organized. It is not just that we have to pay excessive termination fees for international calls from the United States; the underlying assumption about the organization of the market is equally problematic.

Specifically, I am referring to the underlying assumption that international telephone calls must, of some unspoken necessity, be the kind of joint service to which we have become accustomed, with a telephone company in each country having special rights in its home market and providing half of the service.

Now, can you think of any other high-technology business in the world where you would be told that half the product must be assembled here, and half the product assembled there, and each has special rights in its own market?

MODERATOR: Aircraft.

DR. COWHEY: Aircraft is not as bad. At least they have consortia for an Airbus, et cetera. You can sell across. Boeing can sell across national lines even if it has to do products sold out around the world.

The point I am making is that, in a world of digital technology, the current market organization makes no sense. Obviously, you want to allow suppliers to organize the services they find most cost-effective and then to enter and exit the market in whatever manner business strategy suggests. Sometimes you may want to use the old system: that may be convenient if you only want to provide half the service.

On the other hand, sometimes you may want to control both ends of the telephone call. For example, you may be able to introduce new digital services much faster if you control all the switching in the network. If you control all the pricing on the network, and you do not have to cooperate with the foreign
supplier, that may mean that your pricing strategy will simply be more efficient. One can begin to see the types of implications of allowing a change in the structure of supply.

Moreover, in the United States we have had to face a problem along the lines that Bob Cohen was discussing earlier. We have been going through a transition period in which U.S. carriers - in competition to provide long-distance services and international telephone services - were facing monopolies around the world. One of the ways we protected U.S. carriers from being squeezed in their bargaining with foreign monopolists was to require that all U.S. carriers receive uniform accounting and settlement rates from foreign carriers.

The FCC also imposed a regulation providing that, if MCI, for example, sends twenty percent of the switched traffic from the United States to Germany, it is entitled by regulation to twenty percent of the switched traffic coming back from Germany. That way, Germany's telephone company - as a monopoly dealing with competitors - could not play one U.S. telephone company against another. We call that a rule of "proportional return," and it made very good sense.

Nevertheless, in a world with multiple carriers emerging at both ends of every international call, it does not make fundamental economic sense to have the U.S. government setting administrative rules about the shares of ingoing and outgoing traffic in the market.

Consequently, the FCC has been seeking a way to reorganize the supply of international telecommunications services by reorganizing our regulations. The culmination of those efforts is the Flexibility Order that the Commission issued in November.

Basically we said that, in markets where there is effective competition between the United States and its foreign trading partner, the FCC is prepared to waive the use of accounting rates and the insistence on such market-share rules as the "proportional return". Carriers operating in such a competitive environment will be free to propose market-oriented arrangements in those markets, and the FCC will remove the hand of regulation and let the market innovate.

Now, I emphasize that we are primarily thinking about this in terms of competitive markets, because it is in competitive markets that this flexibility makes the most sense.

So, the first thing we have done is to try to open the way to a new generation of options for the supply of international communication services.
Our second initiative addresses the distorted incentives created by the terribly inflated accounting rates. That was the basis of our benchmark notice of proposed rulemaking in December. That rulemaking is exploring the options for the FCC to create, in effect, price caps for the international settlement rates paid by U.S. carriers. I use price caps as a metaphor here, because it captures what we are trying to do, even though we are not technically setting up a price cap system in some traditional, very complex sense.

As we move toward a more competitive market, many of the problems Bob Cohen was citing earlier require serious attention. If a foreign carrier is receiving enormously inflated payments for the termination of U.S. international calls, it opens the possibility that those very payments, and the economic rents being generated by those inflated payments, can fund anticompetitive strategies in the U.S. international market.

Therefore, as we open our market, we are insisting that the termination rates for U.S. carriers be reduced. We are proposing to do so in the benchmark notice, where we lay out several possibilities and invite proposals for others.

I want to concentrate on acquainting you with our basic approach.

First, we calculate what are the likely costs around the world for terminating telephone calls from the United States. We have laid out economic calculations of these costs, according to our best data, for the roughly seventy largest countries for international traffic of the United States.

Second, in order to treat countries according to their relative economic circumstances, we propose to average the costs according to levels of economic development, using the IMF and World Bank rankings of world economies. It is basically a gross-domestic-product-per-capita measure. Essentially, we have three groups: industrial, middle-income, and low-income countries.

In order to calculate what would be the average cost of terminating U.S. traffic in these groups, we took each country's existing tariff prices for these services and averaged them according to income level. Those averages are about fifteen cents for an industrial country, about nineteen cents for a middle-income country, and about twenty-three cents for a low-income country. I want to stress that those averages are not the truly efficient costs of supplying service. Our methodology and data simply allow us to unbundle settlement costs enough to achieve a closer approximation to true costs than do current rates.

Finally, we propose to phase in the price caps on termination services over a period of time that would vary, again, according to the level of economic development: one year for an industrial country, two-to-three years for a middle-income country, and three-to-four years for a developing country. If
there were special circumstances that warranted more time for a developing economy - and we suggest some special circumstances in the proposal - the FCC might allow an additional extension of time.

All this is an effort to lower the costs of termination services from thirty-six cents a minute to a much lower level and to eliminate much of the monopoly profit in the system, thus reducing much of the potential harm to competition. I stress that the benchmarks are substantially above long-run-incremental costs. Therefore, no country will make less than an ample profit for terminating U.S. traffic.

I have one last point. We are engaged in a major negotiation at the World Trade Organization about basic telecommunications services. One of the concerns is that, under this negotiation, the United States would be opening its market to foreign carriers under WTO obligations. There is obviously the potential that, if a foreign carrier with a closed home market enters the United States, it could play a number of anticompetitive games. So, our benchmark proposal also suggests that immediate compliance with our benchmarks for international termination services be made the condition of using a license for international service in the United States - not a condition for entry, but a condition of using a license in the United States.

Suppose, for example, that we had designated a four-year transition schedule for a particular low-income country, and the carrier from that foreign country chose to enter the United States on January 1, 1998. We would issue a license, but, at such time that they wanted to use the license, they would be required immediately to forfeit the transition schedule and to be in full compliance with the benchmarks. The intention, of course, is to reduce the potential for using economic rents in the marketplace to fund anticompetitive strategies.

That is the major way we are addressing the price squeeze in the initial proposals we have had in the NPRM. I know that I have left out a world of detail, but time does not permit. Thank you.

ERIK R. OLBETER: In the interests of time, I am going to be brief and just share with you a couple of details of the study that we are going to be releasing on Friday.

What we tried to do, in coordination with Dr. Cohen's piece, is to take a crack at forecasting the future of the international telecommunications services market - asking where the minutes are and where the demand is coming from - in order to get a sense of how much potential there is for price squeezing and how large would be the potential benefits of a long-run-incremental-cost benchmarking system. This would be a system similar to the one Peter just mentioned.
We do not specifically address the NPRM, because we were working on our paper prior to its arrival. I want to explain a little bit about our methodology and then present some of our results. Also, we have a couple of charts that I lifted from the paper this morning, just to give you a flavor of the results we got with our model.

The first thing to mention is that the task of reforming the accounting rate regime really has to take place within the context of looking at the entire international telecommunications market.

The accounting rate regime and the public switched telephone network, many have claimed, have been under siege for a number of years. In fact, back in 1994, we published our first paper on the international telecommunications market at a time when everyone was saying that the accounting rate regime was going to collapse, because new technologies, new ways of transmitting minutes internationally, were going to take minutes away from the public network and onto the satellites, as well as to various other new private line services.

According to the conventional wisdom at that time, public-switched, international telephone minutes would be moving to international simple resale; to global satellite services; to switched resale services such as call-back, a service that continues to be a very contentious issue between countries; and to international value-added networks, mostly used by large businesses to get around the accounting rate system.

What we have actually seen since 1994 is that the death of the accounting rate regime or, more precisely, the settlement regime, has been grossly exaggerated. In 1996, for example, the United States logged somewhere in the range of $5.5 or $5.6 billion in deficits, and that is an estimate. ESI has calculated that about $4.8 billion of that is in the form of above-cost settlements. In total, from 1980 through 1996, the United States paid about $41 billion in these outbound settlement payments, and approximately $29 billion of that was in the form of above-cost outpayments.

We took a lot of the information and data that has been provided by the International Telecommunications Union (ITU), most recently on the international telecommunications market, and we looked at their assumptions for forecasting short-term, mid-term and long-term prospects for competition, price changes, and demand in foreign countries. The ITU divides countries into three groups: highly competitive markets, noncompetitive markets, and what we call "developing, competitive markets," which are committed to making competition a reality.
We created a scenario-based forecasting model, which has four scenarios based on two oscillating variables. The first variable is the existence of a benchmarking system. The second variable is fluctuation in the development of competition. There is a lot of data on that, not just data on how fast competition will develop in lieu of a WTO agreement, but also data on how fast these new services are going to take minutes away from the public network and move them away from the accounting rate regime.

We looked at the ITU’s forecasts and created two models for competition. One is what we call the accelerated, competitive model. In this, we doubled the ITU estimates for competition. We took what they were saying about call-back services and we doubled the impact it would have on that. We took their estimates for price competition and doubled them.

We call our second model the slow, competitive model - probably a better term is to call it a gradual, competitive market - in which we use the ITU estimates, as well as some of the estimates coming out of Wall Street, as is.

I want to touch on the four main results of our study and then move to our question-and-answer period. The first result indicates that having a systematic long-run-incremental-cost (LRIC) benchmark system in the United States would significantly reduce both settlement payments and net outpayments, as well as the above-cost component, paid by the United States.

On the second page you will see that, from 1997 to the year 2005, with the LRIC benchmark system in place, the models predict that total settlements will decrease in a range from $30 billion to $55 billion. To interpret that, the $30 billion applies if competition is assumed to occur at an accelerated pace. In the slow, competitive model the figure would be somewhere around $55 billion over the course of the next nine years. The above-cost outpayments would decrease between 35 and almost 65 billion dollars over the course of the next nine years.

Next, we looked at what consumers could expect from these types of decreases and changes. We assumed that about twenty-five percent of the accounting rate deficit would be transferred to consumers from 1998 to 2001, and then thirty-three percent would be given directly to consumers in the form of lower prices, from 2001 to 2005. With these assumptions, which we think are not too outlandish, we came up with consumer savings of approximately 10.6 billion to 17.3 billion. So, the consumer savings from this would be substantial.

Finally, we looked at the remainder, which we termed money for potential investment. That is one of the things everyone is seeking now as they go into the local exchange. Having an LRIC benchmark system would free up between 24 and 43 billion dollars for investment within the United States.
The second point, which I alluded to, is that an LRIC-based benchmark system would virtually eliminate the potential for the price squeeze problem that both Bob and Peter mentioned.

Under both scenarios, whether we have an incredibly vigorous, competitive market or we have a foreign international market that develops slowly, overpayments would be reduced to under $300 million a year. Here I think like the senator who says, "A billion dollars here, a billion dollars there, all of a sudden you're talking real money!" Three hundred million dollars is still significant, even though it would not do significant damage to the U.S. market.

By contrast, if an LRIC-based benchmark is not adopted, the average annual overpayments could be around $7 billion. Compare that to $300 million, and it is a significant difference, with a significant potential for anticompetitive behavior.

One other point I would like to mention. Looking at the model and comparing what would happen in a very competitive market and what would happen in a market with more slowly developing competition, it becomes very clear just how important competition really is - not just for the United States but for all countries.

The existence of vigorous competition in foreign markets, not just in facilities-based carriers overseas, but also in satellite services - as well as the other mediums that avoid the public switched network - would reduce overpayments between two billion and twenty billion dollars a year. That is very significant. I think it is important to reiterate that accounting rate reform must take into account the significance of competition overseas as well as some of our policies on accounting rates.

Robert Cohen is an adjunct fellow at the Economic Strategy Institute.

Peter Cowhey, now acting chief of the International Bureau of the Federal Communications Commission, was chief of the Multilateral and Development Affairs Bureau at the FCC at the time of the panel.

Erik R. Olbeter directs the Economic Strategy Institute’s Advanced Telecom and Information Technology Program.