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International Settlement Rates and U.S. Exportation of "Procompetitive Deregulatory Principles" After the WTO Agreement on Telecommunications Services

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On February 15, 1997, seventy countries working within the framework of the World Trade Organization (WTO) agreed on a multilateral reduction of regulatory barriers to competition in international telecommunications services.[1] The signatory nations to the WTO agreement, representing markets generating 95 percent of the $600 billion in global telecommunications revenues in 1997,[2] are now legally bound to open their telephone markets to competition. Within months, however, the Federal Communications Commission (FCC) injected controversy into the new multilateral arrangement by proposing to dictate the prices that other nations may allow their domestic telephone companies to charge to international long-distance carriers for terminating incoming calls from the United States. Those charges for terminating access, known as settlement rates, involve billions of dollars annually and are

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Professor MacAvoy and I originally distributed this paper as Yale School of Management Working Paper No. 51 (October 1997) but never published it. After his death in February 2016, I came upon the paper once more and concluded that it deserved to be published as a case study of the kind of perverse regulation Professor MacAvoy sought to eradicate. With the exception of a brief epilogue written in 2016 after Professor MacAvoy's death, this article is unchanged since he last reviewed it.

1 World Trade Organization, The WTO Negotiations on Basic Telecommunications (Feb. 17, 1997) (unofficial briefing document), https://www.wto.org/english/news_e/pres97_e/summary.htm. For an analysis of the WTO agreement, see J. Gregory Sidak, Foreign Investment in American Telecommunications 367–94 (Univ. of Chicago Press 1997).

2 Edmund L. Andrews, *U.S. Remains Odd Man Out in Global Push for Phone Deal*, N.Y. Times, Feb. 14, 1997, at D1; Anne Swardson & Paul Blustein, *Trade Group Reaches Phone Pact; Experts Say Deal Will Result in Cheaper Long Distance Rates*, Wash. Post, Feb. 16, 1997, at A33.

set pursuant to an international regime that is one of the more arcane niches in the foreboding sprawl of telecommunications regulation.[3]

In August 1997, the FCC issued a report and order on international settlement rates.[4] The purpose of the proceeding was to reduce the cost to U.S. consumers of international telephone calls originating in the United States. The FCC blamed high international rates on an easy scapegoat—the foreign monopolies that, in such countries, control terminating access.[5] Yet the agency ignored evidence, reported by one of us in a book published in 1996, that the leading American carriers operating under the FCC umbrella have, in a tacitly collusive process, set the much larger portion of the price of outbound U.S. calls that consists of initiating access, switching, and transport services.[6]

After providing its faulty diagnosis, the FCC prescribed a quack remedy. American carriers would be forbidden from paying correspondent foreign carriers more than the FCC's benchmark price for terminating access.[7] More important for U.S. consumers, however, was an additional limitation imposed on foreign carrier entry into U.S. international routes. Foreign carriers from nations with settlement rates that exceeded the FCC's prescribed levels would not be certificated to enter U.S. outbound international routes:

> [W]e will condition any carrier's authorization to provide international facilities-based switched service from the United States to an affiliated market on the carrier's foreign affiliate offering U.S. international carriers a settlement rate at or below the relevant benchmark. If, after the carrier has commenced service to the affiliated market, we learn that the carrier's service offering has distorted market performance, we will take enforcement action. That enforcement action may include a requirement that the foreign affiliate's settlement rate on the affiliated route be reduced to a level at or below a "best practice rate," or a revocation of the carrier's authorization.[8]

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3 The settlement rate is half of the *accounting rate*, a term that we will not use to avoid needless complexity. One can think of the settlement rate as the price of using a notional "half circuit" extending from the midpoint of an undersea cable to the central office of the call's destination in the foreign city.

4 International Settlement Rates, Report and Order, IB Dkt. No. 96-261, 12 F.C.C. Rcd. 19,806 (1997), http://digital.library.unt.edu/ark:/67531/metadc2308/m1/404/.

5 "The significant margins on international termination fees that now prevail cause U.S. consumers to pay artificially high prices for international services and discourage foreign carriers from introducing effective competition and cost-based pricing for all telecommunications services. Moreover, the above-cost margins in settlement rates can be used to finance strategies that create competitive distortions in the market for U.S. international services." *Id.* at 19,807–08 ¶ 2.

6 Paul W. MacAvoy, The Failure of Antitrust and Regulation to Establish Competition in Long-Distance Telephone Services (MIT Press & AEI Press 1996).

7 Specifically, the FCC stated that it would "require that U.S. carriers negotiate with their foreign correspondents settlement rates at or below the appropriate benchmark according to a schedule of target reductions." International Settlement Rates, Report and Order, 12 F.C.C. Rcd. at 19,816 ¶ 20.

8 *Id.* at 19,816–17 ¶ 23.

Thus, only six months after the United States joined in the WTO's multilateral approach to liberalizing telecommunications markets, the FCC imposed through its settlement rates order a kind of bilateral reciprocity standard on foreign carrier entry into U.S. outbound international telephone routes. Although the FCC stated that it "would prefer to achieve [its] goals through a multilateral agreement on accounting rate reform,"[9] it also stated that it did "not . . . agree that [its] contribution to multilateral efforts should be [its] exclusive means of addressing accounting rate reform."[10]

The efficacy of bilateral reciprocity has been debunked, not only as a general matter by such eminent trade theorists as Jagdish Bhagwati,[11] but also as a specific tool of international telecommunication policy by such day-to-day practitioners as one of the current authors.[12] The FCC's settlement rates order invites the same criticism. At a minimum, the rule offends the sovereignty of other nations by constraining their ability to pursue their own policies of rate balancing and universal service funding. The development of callback services and the prospect of consumers using the Internet for international voice and data transmissions make high international rates (for either transport or termination) especially vulnerable to bypass. Consequently, there is no basic disagreement among America's leading trading partners that an inescapable need exists to restructure international and local rates. But the FCC's actions are seen in other nations as a presumptuous and intrusive constraint on the options available to local regulators to address that pressing need. From the perspective of other governments, the FCC's rule is akin to the French government telling the New York Public Service Commission how to rebalance rates between local exchange and toll customers. With an arrogance emblematic of its enforcement of the Telecommunications Act of 1996, the FCC shrugged off such concerns as involving only indirect effects on terminating carriers:

> Obviously, by placing a cap on the level of the rate U.S. carriers may negotiate with their foreign correspondents, our actions will have an indirect effect on foreign carriers. International services, by their very nature, require one end of the communications to be handled outside of the United States, and thus rules regarding the U.S. end of the communication may have an impact on the foreign end as well. An indirect effect on foreign carriers, however, does not militate against the validity of rules that only operate directly on carriers within the United States.[13]

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[9] *Id.* at 19,809 ¶ 5.

[10] *Id.* at 19,815 ¶ 18.

[11] *See, e.g.*, Jagdish Bhagwati, *Free Trade: Old and New Challenges*, 104 Econ. J. 231 (1994); *see also* Douglas A. Irwin, Against the Tide: An Intellectual History of Free Trade (Princeton Univ. Press 1996).

[12] *See* Sidak, *supra* note 1, at 216–86.

[13] International Settlement Rates, Report and Order, 12 F.C.C. Rcd. at 19,819 ¶ 27.

Our focus in this paper is not on such matters of jurisdiction and international comity, but rather U.S. domestic economic policy. As a matter of regulatory economics, the FCC's settlement rates order harms the very U.S. consumers that it purports to protect. In that sense, the order cannot be said to be in the public interest. It is true, as the FCC said, that the agency need not rely on multilateral efforts alone to lower prices for U.S. consumers making international calls. But there is a superior alternative to the FCC's policy of bilateral reciprocity. To achieve lower prices for U.S. consumers making international calls, the FCC should adopt a unilateral policy of opening U.S. outbound markets to entry by foreign carriers before proceeding to require foreign countries to place their domestic rate structure for terminating access services under FCC jurisdiction.

I. Did the WTO Agreement Implicitly Incorporate the FCC's Regulatory Policy?

The WTO agreement covers market access, foreign investment, and "procompetitive regulatory principles." The WTO outlined the last of those topics in its April 1996 Reference Paper, which requires signatory nations to guarantee, among other things, that foreign carriers may interconnect with domestic networks at fair prices and not be subjected to anticompetitive cross-subsidization.[14] The FCC's chairman, Reed E. Hundt, characterized the nearly unanimous acceptance of the Reference Paper at the 1997 Geneva talks as nothing less than the exportation and wholesale adoption of enlightened American regulatory policies:

> By this agreement, the Telecommunications Act enacted a year ago by Congress has become the world's gold standard for pro-competitive deregulation. Sixty-five countries have bound themselves to the Reference Paper embodying the Congressional vision of free competition, fair rules, and effective enforcement.
>
> In Buenos Aires three years ago, at the first International Telecommunications Union development conference, Vice President Gore challenged the nations of the world to build a network around the globe linking all human knowledge and creating global opportunities. One year ago, Congress delivered a clear and compelling blueprint for the competition that will build this network: Today, the nations of the world endorsed that blueprint.[15]

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[14] World Trade Organization, Negotiating Group on Basic Telecommunications, Reference Paper (Apr. 24, 1996), https://www.wto.org/english/tratop_e/serv_e/telecom_e/tel23_e.htm. This document is reprinted in Sidak, *supra* note 1, at 397–99.

[15] Statement of FCC Chairman Reed Hundt Concerning WTO Agreement on Telecom Services (Feb. 15, 1997), https://transition.fcc.gov/Speeches/Hundt/st021597.html (released Feb. 18, 1997).

There is reason, however, to question whether the Reference Paper—or, more to the point, the interpretation that American regulators have subsequently given to that paper—will indeed produce deregulatory principles. The FCC has not in its domestic implementation plan for the Telecommunications Act of 1996 practiced principles of "procompetitive deregulation." In the week following the successful completion of the WTO agreement, Deputy U.S. Trade Representative Jeffrey Lang, commenting to a Washington, D.C. audience on the principles contained in the Reference Paper, observed that "to move from what was regarded for 100 years as not just a monopoly but a natural monopoly . . . to a system of enforced competition means not deregulation but *reregulation*. And that is what the pro-competitive principles embody."[16] The promotion of competition, it would seem, requires reregulation. At the same event Chairman Hundt said that, just as "the laws of physics are everywhere the same, . . . it may well be that the laws of economics can be demonstrated to everywhere be the same," such that there would be no need to have "different ways to resolve issues such as forward-looking pricing."[17]

It is true that microeconomic principles are the same everywhere. But the danger inherent in Chairman Hundt's view is that if the FCC produces misguided policies—such as its 1996 First Report and Order on the pricing of unbundled network elements under the Telecommunications Act of 1996[18]—then the implementation gloss that the FCC has placed on the WTO's Reference Paper would force on other nations a set of practices predicated on a fallacious bar of good economic reasoning.

II. International Settlement Rates

To the extent that settlement rates are substantially above the long-run incremental costs of terminating calls, the current system contributes to inefficiencies in the use of resources in global telecommunications markets. By itself, however, the restructuring of those settlement rates according to FCC rules will not reduce those inefficiencies and generate benefits for domestic consumers. The empirical evidence compiled by MacAvoy indicates that U.S. outbound international tariff rates are not competitive. So long as incumbent U.S. carriers are sheltered from effective competition, principally through

[16] Jeffrey Lang, Deputy U.S. Trade Representative, Remarks to the Center for Strategic and International Studies, Washington, D.C. (Feb. 21, 1997) (emphasis added).

[17] *Id.* (comments of Reed E. Hundt).

[18] Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 and Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers, First Report and Order, CC Dkt. Nos. 96–98, 95–185, 11 F.C.C. Rcd. 15,499 (1996). For a critique of the First Report and Order, see J. Gregory Sidak & Daniel F. Spulber, Deregulatory Takings and the Regulatory Contract: The Competitive Transformation of Network Industries in the United States (Cambridge Univ. Press 1998); J. Gregory Sidak & Daniel F. Spulber, *The Tragedy of the Telecommons: Government Pricing of Unbundled Network Elements Under the Telecommunications Act of 1996*, 97 Colum. L. Rev. 1081 (1997).

FCC certification policies, one cannot expect those carriers to pass along to end users their cost savings from reduced settlement rates. The FCC, therefore, should not proceed to enforce its 1997 settlement rates order until the agency has taken steps to establish, with all deliberate speed, full-scale entry into U.S. markets for outbound international calls. Price reductions of genuine benefit to U.S. consumers will result only from coupling settlement-rate reductions with entry by foreign carriers that intend to compete directly with incumbent U.S. carriers.

This is a very large argument, requiring the bundling together of disparate policies. But combining settlement rate and market entry reforms is a policy that rests on sound economic principles. In the settlement rates proceeding, the FCC ignored two major points. First, U.S. outbound international tariff rates have not become more competitive since AT&T lost its monopoly as a result of the Bell System divestiture. On U.S. outbound international routes, margins of prices over marginal costs are higher than in any domestic long-distance market; those margins have risen over time; and changes in them bear the imprint of tacit collusion among the largest three carriers.[19] The FCC neglected to discuss such evidence at all in its report and order on settlement rates.

Second, the benchmark prices that the FCC has imposed for settlement rates are not grounded in economic principles of efficient market pricing. In some cases, the rates would result in prices above relevant marginal costs, while applications elsewhere would lead to prices below marginal costs. Those rate-cost margins, both positive and negative, cause allocative inefficiency because they give purchasers of international telephone services distorted signals of the true costs of those services. Given the coordinated pricing of the major U.S. long-distance carriers, reductions in settlement rates will not reduce prices appreciably for consumers.

In addition to ignoring both the economic theory and the evidence on competitiveness, the FCC, as noted earlier, adopted the wrong quid pro quo: The American affiliate of a foreign carrier may not provide U.S. outbound international service to that foreign carrier's market unless the foreign carrier offers domestic U.S. international carriers a settlement rate consistent with the FCC's benchmark. Business and regulatory experience indicates that the FCC's proposal would be unlikely to benefit American consumers, because it is not profitable for foreign carriers to sacrifice as a result of home market entry more than they gain from becoming outbound U.S. carriers. In effect, the FCC was imposing on international telecommunications the same reciprocity model to which the Bell operating companies were subject under the "checklist" provisions of section 271 of the Telecommunications Act of 1996

[19] MacAvoy, *supra* note 6, at 157–71.

when those carriers seek to initiate in-region interLATA (long-distance) service: A Bell company may not enter the in-region interLATA market until it has proven that its local exchange market is competitive, as defined by the section 271 checklist of condition.[20] As of late 1997, that process had produced no competitive entry into in-region long-distance markets—to the contrary, it had produced only repeated litigation over whether the Bell Company had complied with the preconditions for entry. Given that poor record from supposedly opening the domestic U.S. long-distance market to "competitive entry," foreign carriers and governments are justifiably concerned that exporting the section 271 process through the FCC's settlement rates order will result in no more than increases in profit margins for U.S. incumbent carriers.

A more promising initiative that bundles the 1997 settlement rates order would be for the FCC to invite the establishment of at least one full-scale foreign carrier in each foreign market for U.S. outbound services from each of the major population centers. Based on projected rate reductions, resulting from the entry of a foreign carrier likely to acquire 10 to 25 percent of total traffic on those outbound routes, American consumers would realize substantial savings from competitive entry. In addition, the entry would more likely result in outbound carriers passing on to consumers any cost reductions from lower settlement rates. It would better serve U.S. consumers for the FCC to defer settlement rate reform until the foreign carrier entry program called for in the recent WTO agreement could be put in place.

III. Are U.S. Outbound International Telephone Rates Competitive?

An appropriate test for competitiveness in a market is how carriers set and hold their price-cost margins.[21] In another context, one of us has analyzed price-cost margins for U.S. outbound international telephone rates to eight correspondent foreign countries (Canada, Mexico, the United Kingdom, Germany, France, Italy, Japan, and the Dominican Republic) for the period 1991 through 1994.[22] MacAvoy determined that price-cost margins were increasing despite decreasing concentration in carriers serving each country pair.[23] That inverse relationship of price-cost margins and industry concen-

[20] 47 U.S.C. § 271. For an explanation of the section 271 process, see MacAvoy, *supra* note 6, at 200–10.

[21] *See* MacAvoy, *supra* note 6, at 157–71.

[22] Price-cost margins are defined as (price – marginal cost) / price. Index prices for International Measured Telephone Service (IMTS), Discount Calling Plans, and Inbound WATS (IWATS) services were estimated from FCC tariffs for AT&T, MCI, and Sprint, and incorporated assumptions about call distribution according to applicable time-of-day discounts and destination country. *Id.* at 157–62 & app. 3. Estimates of marginal costs included components for originating access costs, network transport costs, and settlement costs (net of inbound settlement payments). *Id.* at 162–63.

[23] *Id.* at 169.

tration contradicts the competitive hypothesis that decreasing concentration results in decreasing price-cost margins. Based on that analysis, it can be concluded that international MTS and WATS services became less competitive over the first half of the 1990s. The observed relationships between margins and concentration suggests the alternative hypothesis that U.S. outbound international telephone markets have been increasingly marked by tacitly collusive pricing behavior among the leading three carriers.

In addition, price-cost margins on standard tariff outbound service by AT&T, MCI, and Sprint have generally been very high: Five of those eight countries accounting for more than half of U.S. outbound traffic had margins that exceeded 70 percent.[24] Similarly, price-cost margins for discount services in U.S. outbound markets were also stable or increasing, generally paralleling those for standard services upon which their discounts had been based. Price-cost margins for outbound WATS services also increased from 1991 to 1994, despite declines in concentration of the three large outbound service providers.[25]

Concentration among carriers serving those correspondent markets has also been very high but has decreased markedly over the first half of the 1990s. As measured by the Herfindahl-Hirschmann Index (HHI), in five of those country-pair markets (Germany, Japan, France, the Dominican Republic, and Italy) the HHI fell from 1.0 in 1990 to values ranging between 0.42 to 0.56 in 1994 (or, given that the HHI equals $1/n$ for n equal-sized firms, equivalent to a reduction from a monopoly to that for almost two equally sized firms).[26] Yet price-cost margins did not decline. Instead, they were constant or rising during that period. Table 1 shows the resulting high margins on standard tariff calls to Japan, France, and Canada.

[24] *Id.* at 164.
[25] *Id.* at 165.
[26] *Id.* at 166.

Table 1. HHIs and Standard MTS Price-Cost Margins (1994)

		Price-Cost Margins		
Country	**HHI**	**AT&T**	**MCI**	**Sprint**
Canada	0.42	0.80	0.74	0.71
Mexico	0.55	0.45	0.58	0.60
United Kingdom	0.50	0.80	0.84	0.84
Germany	0.56	0.70	0.72	0.75
Japan	0.43	0.87	0.82	0.84
France	0.49	0.90	0.76	0.74
Dominican Republic	0.52	0.50	0.40	0.41
Italy	0.56	0.58	0.58	0.81

Source: MacAvoy, *supra* note 6, at 167.

Further, Table 1 indicates no obvious relationship between a lower HHI and a lower price-cost margin across country-pair markets. Japan, for example, had the lowest HHI and the highest price-cost margin in 1994—84 cents of every dollar was profit margin on calls from New York to Tokyo. That inverse relationship between concentration and spread in price-cost margin is additional evidence consistent with the hypothesis that tacit price coordination restrained effective competition in the U.S. outbound market during the period from 1991 to 1994.

Settlement rates are a significant component of the marginal costs of international telephone carriers, and, in certain country-pair markets, they erode the otherwise high profitability of providing outbound international service. Classical competitive theory (and the FCC) suggest that reductions in settlement rates would be passed along to consumers, so that price-cost margins over time would end up at the same level across countries. But the fact is that price-cost margins earned by U.S. international carriers from 1991 to 1994 reveal a disparity across various correspondent countries, with lower margins on services to countries with higher settlement rates: for example, price-cost margins were significantly lower for service to Mexico and the Dominican Republic than for service to France and Japan.[27] The pattern follows that of country-to-country settlement payments—those to Mexico equaled 51.3 cents per minute and those to the Dominican Republic equaled 63.0 cents per minute, both more than twice those to France and Japan at 24.0 cents and 24.9 cents, respectively. That pattern follows from the outbound carriers treating the net payments as taxes on margins: Price-cost margins are largely the same across countries, inclusive of settlement

[27] *Id.* at 170.

payment; where payment rates are higher, they are absorbed in the margin to minimize the effect on the price level. It follows that, if the settlement rate in some country were reduced by the FCC's 1997 settlement rates order, then price-cost margins and prices for the outbound service to that country would not be reduced.

In summary, the data from those eight major countries indicate that price-cost margins on U.S. outbound calls were highest to foreign countries for which service provision was least concentrated, and for which concentration was declining.[28] Price-cost margins were highest for the longest-distance service. Most to the point, margins were highest for service for which the receiving country set the lowest charges for terminating calls. All those conditions refute the assertion that prices will decrease with the FCC's order demanding that foreign governments reduce settlement rates.

IV. Will Reductions in Settlement Rates Reduce Final Consumer Prices?

In its settlement rates proceeding, the FCC solicited comments on "how to encourage U.S. carriers to reflect the reductions they receive in their settlement rates in their prices to consumers."[29] In its report and order, however, the FCC rejected the proposition "that competition in the U.S. market for international services may be insufficient to ensure that settlements savings are fully reflected in reduced collection rates."[30] Although the FCC conceded that "competition in the U.S. market for IMTS is not as robust as we would like,"[31] hope nevertheless sprang eternal in the agency's view of the future:

> [W]e anticipate that the U.S. market for IMTS will become increasingly competitive as a result of the WTO Basic Telecom Agreement. The Section 214 authorization conditions we adopt here will help promote further competition in the U.S. market for IMTS by addressing potential market distortions created by above-cost settlement rates. Moreover, the eventual entry of new entrants such as the Bell Operating Companies into the international services market will further increase competition.[32]

The FCC's incomplete success in achieving pass-through by interexchange carriers of access-charge reductions domestically under price-cap regulation[33] should make one skeptical that such a goal can be achieved by regulatory

[28] *Id.* at 172.
[29] International Settlement Rates, Report and Order, 12 F.C.C. Rcd. at 19,929 ¶ 268.
[30] *Id.* at 19,930 ¶ 270.
[31] *Id.*
[32] *Id.*
[33] *See* MacAvoy, *supra* note 6, at 3 n.2; Jerry A. Hausman, *Competition in Long-Distance and Telecommunications Equipment Markets: Effects of the MFJ*, 16 Managerial & Decision Econ. 365 (1995).

means in complex and far-flung foreign markets. That is particularly unlikely in international outbound markets without any price regulation of firms in noncompetitive, well-established relationships.

There are two basic reasons. Analytically, the price-cost margin is equal to the concentration index, multiplied by a collusion index, both divided by the elasticity of demand.[34] None of those factors would change if there were a policy-inspired reduction in net payments rates imposed on the outbound carriers. With constant margins, prices would be reduced only if the carriers' long-run incremental costs were to decline—which would be the case only if the carriers considered net settlement payments to be part of costs for such price-setting purposes. MacAvoy's analysis of margins from 1991 to 1994 indicates, however, that the carriers have not operated in that way. Rather, U.S. carriers have raised or reduced margins across countries in response to variations in settlement rates, so as to hold margins inclusive of settlement rates at roughly the same level.

Consider, as only an example, in the preceding table the prices and margins for AT&T's outbound standard tariff services from the United States to Germany, France, Italy, and the Dominican Republic. Prices ranged in 1994 from $1.078 to $1.261 per minute, with those for the first three countries clustered around $1.12 and that for the Dominican Republic as high as $1.261. Price-cost margins for the first three varied from 0.58 to 0.90, and for the last was 0.50. Settlement rates for the first three were 40 cents less than that for the last, and the difference was absorbed by a .20 to .30 reduction in margins. In effect, AT&T "absorbed" high settlement rates in reduced margins. That pattern suggests that, if high settlement rates were reduced, then such FCC requirements would result only in increased price-cost margins for AT&T, MCI, and Sprint.

V. Full-Scale Entry of Foreign Carriers into U.S. Outbound Markets

The most effective way for the FCC to ensure settlement-rate reform that will result in reduced international calling prices for U.S. consumers is to develop more competitive outbound call markets. Any correct policy would have to focus on the entry of foreign carriers into outbound service markets from the United States and would have to couple that initiative to settlement rate reform. Full-scale entry of foreign carriers into U.S. outbound markets would be more likely to produce gains to consumers than would the FCC's settlement rate order alone.

[34] That is, across all firms in the market with the same price, $(p - mc) / p = HHI\ (1 + v) / -e$, where *HHI* is the Herfindahl-Hirschmann Index, v is the coefficient of across-carrier conjectural variation in volume of service, and e is the market elasticity of demand. *See* MacAvoy, *supra* note 6, at 99–103.

Analytically, entry results in price-cost margin reductions given that it reduces concentration. All other things being the same, given the rule of profitable firm conduct described in the preceding footnote, declines in the shares of the three large U.S. carriers reduce margins. At some level of entry, tacit collusion breaks down (so that conjectural variation decreases). The result would be margins at levels consistent with widespread competition.

Consider, for example, the effects of entry in U.S. outbound service to Germany, Italy, and France. With the foreign carrier able to acquire only 20 percent of the traffic, prices should decline by fifteen to twenty cents per minute. With a "breakdown" of tacit collusion among the incumbent domestic carriers, as a second result, prices should fall by another fifty cents per minute (as the coefficient of conjectural variation falls from 1.5 to 0.5). The new entry could cause the domestic carriers to cease "absorbing" different settlement rates. At that point, settlement rate reform could very well bring about a further twenty-cent reduction in prices per minute.

VI. Conclusion

The FCC has conditioned foreign carrier entry into outbound U.S. international telephone routes on the agency's determination that settlement rates in the carrier's home market are no higher than certain FCC benchmark prices. That agency also erects a reciprocity test that has the incidental effect of delaying the establishment of effective competition in the U.S. outbound market by impeding entry by the world's largest foreign carriers. The sum total effect unambiguously harms American consumers.

Moreover, given the resentment that such a policy will engender among foreign regulatory bodies, one can hardly suppose that the losses to American consumers are somehow offset by gains to American producers doing business in those countries. In short, *American* economic welfare suffers under such a policy, a result that cannot be "in the public interest," which the FCC is mandated to protect.

Instead, the FCC should pursue the one course of action that apparently it has never considered, given its demonstrated fondness in both domestic and international telecommunications markets for rules that turn on bilateral reciprocity. The agency, in short, should unilaterally authorize, as expeditiously as possible, foreign carriers to provide U.S. outbound services to other nations. In the process, the FCC should seek to bring settlement rates in line with the provision of termination service in all countries. Then

both margins and costs for all (competing) carriers would fall, and consumers would have a good chance of being able to call Tokyo for a cost-based 20 cents per minute.

VII. Epilogue, 2016

The FCC justified its 1997 benchmarks policy by noting that, at the time, "international calling rates remained high because in many countries, competition was non-existent or insufficient to drive settlement rates down to cost-based levels."[35] The goal of that policy was to reduce "above-cost settlement rates paid by U.S. carriers to foreign carriers for the termination of international traffic, where market forces had not led to that result."[36]

However, the FCC eventually acknowledged that its 1997 policy had shortcomings. The rigid benchmarks of the 1997 policy "prevented U.S. carriers from negotiating flexible, individualized rates and terms that are responsive to changing market conditions and beneficial to U.S. customers."[37] Consequently, in 2004, the FCC revised its international settlement rates policy to relax its benchmark requirements for cases in which U.S. carriers had negotiated benchmark-compliant rates.[38] In 2012, the FCC went further, finding that regulation of international settlement rates was "no longer necessary" and could, in some cases, be "unnecessarily burdensome."[39] The FCC therefore eliminated such regulation between U.S. carriers and carriers in international countries, with the exception of Cuba.[40] Then, in February 2016, the FCC proposed eliminating the Cuba exception, which, if adopted, will mark the end of the FCC's policy of regulating international settlement rates.[41] The eventual demise of international settlement rate regulation confirms our diagnosis in 1997 that such regulation has had little, if any, benefit for U.S. consumers.

[35] *International Settlements Policy and U.S.-International Accounting Rates*, Federal Communications Commission, https://www.fcc.gov/general/international-settlements-policy-and-us-international-accounting-rates.

[36] *Id.*

[37] *Id.*

[38] International Settlements Policy Reform, First Report and Order, IB Dkt. No. 02-324, at 3 ¶ 2 (Mar. 30, 2004), https://apps.fcc.gov/edocs_public/attachmatch/FCC-04-53A1.pdf.

[39] International Settlements Policy Reform, Report and Order, IB Dkt. No. 11-80, at 15,522 ¶ 1 (Nov. 29, 2012), https://apps.fcc.gov/edocs_public/attachmatch/FCC-12-145A1_Rcd.pdf.

[40] *Id.*

[41] Federal Communications Commission, *supra* note 35.