brought to you by **CORE** 



# Number 00-7 September 2000 International Economics Policy Briefs

# "No" to Foreign Telecoms Equals "No" to the New Economy!

# Gary C. Hufbauer and Edward M. Graham Institute for International Economics

Gary C. Hufbauer is Reginald Jones Senior Fellow and Edward M. Graham is a senior fellow at the Institute for International Economics. Graham is the author of Fighting the Wrong Enemy: Antiglobal Activists and Multinational Enterprises. Hufbauer is coeditor of Unfinished Business: Telecommunications after the Uruguay Round.

© Institute for International Economics. All rights reserved.

Within a few weeks, the United States will make a pivotal decision—whether to prohibit foreign telecommunications firms that are partly owned by foreign governments from competing in the US market. The decisive case is Deutsche Telecom's bid to acquire the US mobile telephone operator VoiceStream (and VoiceStream's own new acquisition, PowerTel).

Senator Ernest Hollings (D-SC) is doing everything he can to stop the German telecom giant. Along with 29 Senate cosponsors, Hollings has introduced a bill (S. 2793) that would block Deutsche Telecom, or any other telecom owned more than 25 percent by a foreign government, from acquiring a US telecom firm. S. 2793 may not pass, but to reinforce their objections, Senator Hollings and the 29 other senators wrote a stern letter to William Kennard, Chairman of the Federal Communications Commission (FCC), urging the FCC to block the acquisition. Hollings worries about what he sees as the unfair character of competition between privately-owned US telecom firms and publicly-owned foreign firms. To put the debate in a sound bite, "How can a private firm compete with a government wallet?"

But even at the sound bite level, it's wrong to characterize Deutsche Telecom as an extension of the German government's wallet. Deutsche Telecom is now 42 percent privately owned (US investors own approximately 20 percent of all privately held Deutsche Telecom shares). Acquisition of VoiceStream by Deutsche Telecom, through a share exchange, will increase the private ownership of Deutsche Telecom to 55 percent. The German Federal Government is already a largely passive investor, holding no "golden share" in Deutsche Telecom and only one of 20 board seats; in fact, the German government plans to sell off the rest of Deutsche Telecom as fast as market conditions permit. Deutsche Telecom enjoys no special tax breaks. Nor

If Hollings prevails in his campaign to block Deutsche Telecom, two groups of Americans will be certain losers all US consumers and most US telecom companies.

can it borrow from the German Finance Ministry. Indicative of the arm's length relation between Deutsche Telecom and the German government is that the Standard & Poor's credit rating for Deutsche Telecom is AA- (the same as AT&T, SBC, and BellSouth), while the German sovereign rating is AAA.

If Hollings prevails in his campaign to block Deutsche Telecom, two groups of

11 Dupont Circle, NW \* Washington, DC 20036-1207 Tel: (202) 328-9000 \* Fax: (202) 328-5432 http://www.iie.com

## September 2000

Americans will be certain losers—all US consumers and most US telecom companies. Potential corporate winners may be lurking in the background, but so far they have kept out of sight.

To understand why the Hollings initiative can inflict so much damage, and finds so little support among US telecom firms, let alone US consumers, it's useful to start with a short background on telecom economics.

# **Telecom Economics**

The telecommunications industry-once a staid investment for widows and orphans-is simultaneously going through two revolutions. These are almost the industrial equivalent of the American and French Revolutions happening simultaneously. On the one hand, the industry is being rocked by an explosion of new technology and applications of this technology-digital, mobile/PCS, broadband transmission, internet, e-commerce and more. On the other hand, there's the dramatic introduction of competition into what was once a near-monopoly industry, not only in the United States but everywhere else as well. Working together, technology and competition have made telecommunications the main engine driving the information technology revolution. Once telecommunications was largely about calling mother on Sunday night. But now telecommunication networks have become the muscles that drive the "new economy". When these muscles work well, we see the economic equivalent of an Olympic marathoner; when they work poorly, we see the oncea-month jogger.

#### **Network Economics**

But there's another dimension to the story—network economics. A telecom network becomes exponentially more valuable when more companies, people, and services are connected to that network. Thus, a network with 50 million customers is twice the size but many more times the value of a network with 25 million customers.

The value of a network to a telecom firm increases faster than its size because the marginal cost of adding additional subscribers and services is a fraction of the fixed cost of building the backbone of the network. This is why Deutsche Telecom can bid roughly \$51 billion for VoiceStream, more than \$15,000 per customer. Voice Stream (in combination with PowerTel) is only the sixth largest telecom nationwide, with around 3 million existing customers. Potentially, however, it could serve nearly 250 million Americans. As it expands in the rapidly growing US wireless market, with finance and technology from Deutsche Telecom, the cost of serving additional customers will fall dramatically.

Importantly, the value of the service provided by the network to the customer also increases exponentially with the size of the network. Thus, for example, both modern e-mail and traditional voice telephony are of great value to the user because both can be used to reach millions of other users. If the number of persons connected to the network were small, the value of being connected would also be small. (For this reason, telecom firms interconnect their networks, so a customer of one network can reach customers on other networks.)

Thus, the larger a network, the more valuable it becomes to its business and household users, because they enjoy a seamless reach to more firms, people and places. And this value is increasing as the result of new technology: For example, technology has enabled households to add broadband computer connections at low cost to their basic telecommunications service. With this connection, they can access foreign Web sites and even order merchandise from abroad. Business firms can link their remote offices and factories using customized voice, video, sound and data facilities.

... the larger a network, the more valuable it becomes to its business and household users, because they enjoy a seamless reach to more firms, people and places.

### The Urge to Merge

Network economics are a supercharged variant of economies of scale. Every student who passes Economics 101 can predict the outcome in an industry that is characterized by powerful economies of scale. Firms will merge in order to reduce costs. If carried too far, of course, these combinations could lead to one firm that monopolizes the industry. But that outcome seems remote in telecommunications. Rather, firms are entering what once used to be another firm's exclusive market simply to remain competitive. This is happening on a world scale. US firms are the most aggressive players in this global game: Five of the world's top ten telecom firms are based in the United States-and they are growing like kudzu in every corner of the globe. Four foreign firms, with substantial government ownership, are also in the top ten-NTT (Japan), Deutsche Telecom, France Telecom, and Telecom Italia. Telefonica (Spain) is close behind.

The Deutsche Telecom acquisition of VoiceStream (and Powertel) exemplifies the sort of horizontal expansion that *adds* to competition in the U.S. market. Deutsche Telecom, like most other foreign carriers (Mannesmann/Vodaphone is an exception), has no significant presence in the US market. If Deutsche Telecom makes an entry, it will add to competition. VoiceStream can potentially 00-7

3

serve nearly all American households. But VoiceStream is now the sixth largest player in the US market. Unless it combines with another player, it won't have the capital and technology to expand and compete. And with Verizon, SBC, BellSouth, AT&T and Sprint already nationwide carriers, unless VoiceStream combines with a carrier not already in the US market, a VoiceStream merger is likely to *subtract* competition.

### **Pro-competitive Regulation**

While the Deutsche Telecom acquisition potentially adds to competition in the US market, that isn't necessarily true of all telecom mergers and acquisitions. Indeed, there's an obvious tension between the network cost reduction enabled by consolidation and expansion and the price benefits of wide-open competition. All telecom companies would go broke if competition drove prices down to the level of marginal costs for their services. If prices were to equal marginal costs, the firms would never recover the huge fixed costs of investment that go into setting up fiber optic connections, wireless relay stations, and the development of new technology. On the other hand, consumers would be short-changed if there was not enough competition to drive prices down to the level

... the United States has reached a point where it actually needs entry by big foreign players ... to ensure that the competitive benefits of cheap telecommunications reach American consumers in each and every niche of the market.

of average costs. When prices do equal average costs, firms can recoup the fixed costs of creating networks, including those of developing innovative technologies, while customers receive maximum value from using the network.

There are two ways of reconciling the age-old conundrum between industrial consolidation and ensuring that prices approach average cost. The oldfashioned way is detailed price and entry regulation, service-by-service, customer-by-customer, region-byregion. The problem with price and entry regulation is that it usually gets captured by lawyers in the pay of telecom firms. They do their best to establish monopoly practices under the cloak of public oversight. Once captured, price and entry regulation can be used to create undesirable barriers to innovation and new players.

The newer reconciliation, now practiced worldwide, is to welcome the widest number of firms into the market, and regulate the industry in a pro-competitive manner to ensure that incumbents don't block innovation and new entrants. The free-for-all of the market then drives down prices. That was Judge Harold Greene's strategy when he broke up AT&T in 1982, and it has since become the guiding star of FCC policy. The pro-competitive strategy has in fact delivered a more abundant economic cornucopia than anyone twenty years ago could have expected.

The newer reconciliation has delivered powerful benefits to US consumers. A great example is mobile telephony—VoiceStream's business. Until 1995, every regional market had only two mobile telephone operators—the regional bell operating company and the winner of the FCC's cellular license lottery. New competitors began to enter the market in 1995. Now, nearly 70 percent of American households are served by at least five mobile operators. The result: between 1994 and 2000, average mobile telephone rates were slashed from 57 cents a minute to 24 cents a minute. As this example illustrates, it takes at least five players in the market to ensure that competition will drive prices down towards average cost.

So where can a new competitor like VoiceStream go to seek a large partner with the financial resources to expand its wireless business? And where can the United States find new players for other niches in the burgeoning telecom market? The United States has reached a point where it actually needs entry by big foreign players—companies like NTT, Deutsche Telecom and France Telecom—to provide the financial clout to ensure that the competitive benefits of cheap telecommunications reach American consumers in each and every niche of the market.

Aha! But can competition really be fair when a foreign government owns one of the players? That's the nub of Senator Hollings' campaign against Deutsche Telecom and other government-owned telecoms, like NTT and France Telecom, that want to buy into the US market.

#### What About Government Ownership?

Twenty years ago, virtually all telecom companies were either regulated private monopolies (like AT&T), or government corporations, like Deutsche Telecom. They kept each other at arm's length, charged stiff interconnection rates for transmitting voice or data to local customers from foreign carriers, and blocked the entry by newcomers who wanted to offer cheaper long distance, wireless service, or user hardware like office switchboards. The main complaint against government ownership was that it served to block entry into the telecommunications sector and keep prices far higher than necessary.

But all this has changed. Through privatization and pro-competitive regulation, telecom companies in Europe are being forced to shed their monopoly

# September 2000

vestiges in favor of slugging it out in the marketplace. The pro-competitive regulatory approach has many elements, pioneered in concept by Judge Greene and the FCC in the United States during the 1980s, expanded by Congress in the 1996 Telecommunications Act, and adopted internationally by the World Trade Organization in the 1997 Basic Telecom Agreement.

Thus, other countries are restructuring their telecom industries, and not just to accommodate US wishes. Instead, a stark realization is driving the shakeup of ancient telecom monopolies: No country has a prayer of prospering in the new economy without innovative and competitive telecom service providers that provide the latest and best technologies to customers at the lowest possible cost.

Of the two ingredients of the new telecom industry outside the United States, privatization and procompetitive regulation, the latter is in fact the most

. . . the United States already has in place an array of means by which it can deal with Deutsche Telecom—if it actually behaves as Senator Hollings fears.

important. Some countries—Mexico and Singapore being just two examples—privatized their public telecom carriers without implementing pro-competitive regulation. In particular, the telecom firms were protected from foreign competition. The result? A high value for shares when the public telecoms were sold, but also high rates and low innovation for customers in the years thereafter. In fact, Mexico and Singapore, under these policies, did not fully participate in the benefits of the new economy.

By contrast, most European countries have embraced pro-competitive regulation, while gradually privatizing their telecom sectors. Britain led the way when it privatized British Telecom and followed up with pro-competitive regulation that opened the way for entry of new carriers. Germany is on the same path. More importantly, Germany has implemented all the elements of pro-competitive regulation contained in the WTO Basic Telecom Agreement. Entry by new service providers in Germany now is allowed and, indeed, one result has been that long distance and international rates have dropped by more than 70 percent. Nearly 150 carriers now offer local service. Four competitors are fighting for the mobile market. Deutsche Telecom in fact is only the second largest mobile operator in Germany. Leading US companies hold stakes in the German market: AT&T, WorldCom, Qwest, Global Crossing and many others. German Internet density is fast approaching US levels, with 20 million subscribers by the end of 2000. America Online is the second largest Internet service provider in Germany.

#### Why American Consumers Lose under Hollings

American consumer interest is plain and simple. The larger the number of telecom giants operating in the US market, the keener the competition, the lower the prices, the faster the innovation—all propelling the new economy. If the Congress passes the Hollings bill, or if the FCC uses its existing statutory powers to block Deutsche Telecom's acquisition of VoiceStream, that will send a powerful message: Foreigners keep out until you are 75 percent privatized!

Privatization is certainly desirable. It's already happening in Europe, Japan and elsewhere. Hollings worries that the pace of privatization is too slow. But to block entry into the US market by foreign telecom firms until they are 75 percent privatized is impatience with a vengeance! In another five to ten years, nearly all these foreign firms will indeed be privatized to Hollings' 75 percent threshold. But in the meantime, American consumers will lose the benefit of stronger competition. And with the US telecom market more mature and expanding less rapidly five or ten years hence, it will be much harder for a newcomer to build a big enough customer base to cover the fixed costs of entry. Under the Hollings bill, US consumers will long be denied the benefits of additional competition from firms like Deutsche Telecom, France Telecom, NTT and others.

#### Why US Telecoms Lose under Hollings

Outside the United States and a few other nations, in practically every country, battles are constantly being fought between those who advocate telecom competition and innovation, and incumbent telecom operators who would rather do things their way at their time. In these battles, US telecom firms are agents of change. They are bursting into markets everywhere, foremost in Europe. From the standpoint of Europe's own self interest in its transition to the new economy, it should welcome AT&T, MCI Worldcom, SBC, Verizon, and all the rest of the American pack—whatever the outcome of Senator Hollings' efforts.

But let's be realistic. If Deutsche Telecom is blocked, the *status quo* forces in Europe and elsewhere will learn by bad example: They will find new reasons to block US telecom expansion. US telecom firms would then be big time losers. But so will US consumers. Households and firms that are seeking low cost, seamless, high-quality connections to Europe could, in many instances, be disappointed.

#### What if Hollings is Right?

Despite everything in the WTO Basic Telecom Agreement and German actions, Hollings could still be right to worry about a government-controlled player in the US telecom market. After all, Deutsche Telecom, like AT&T, enjoys the advantages that go with 100 years as the incumbent carrier. In opaque ways, Deutsche Telecom might use these advantages to keep prices high and innovation low in Germany, while applying the profits to enlarge its foothold in the US market—by offering bargains to the VoiceStream customers. In a word, what if Deutsche Telecom behaves like a predator? This scenario appears to have no factual basis in Deutsche Telecom's case, but it cannot be dismissed as a mere theoretical concern.

Fortunately, the United States has instruments besides the blunt Hollings bill to address this concern. Exercising its statutory authority, the FCC can condition approval of the VoiceStream acquisition on appropriate benchmarks of Deutsche Telecom operations, not only in the United States but also in Germany. The U.S. president—acting under the ExonFlorio act, administered by the Treasury-chaired Committee on Foreign Investment in the United States, CFIUS—can block or modify the acquisition if it poses a national security concern. Once the acquisition is complete, the FCC can continue to monitor the operations of Deutsche Telecom and VoiceStream in the US market. And, importantly, the Department of Justice can take remedial action if Deutsche Telecom, through VoiceStream, behaves as a predator and attempts to establish a monopoly by doing harm to its domestically-owned competitors. In short, the United States already has in place an array of means by which it can deal with Deutsche Telecom—if it actually behaves as Senator Hollings fears.

To enact the Hollings bill is to shout a triple "No!": "No" to foreign competition, "No" to American consumers, and "No" to US telecom firms. To shout this triple "No" is tantamount to shouting "No" to the new economy and the prosperity it is bringing.

The views expressed in this publication are those of the authors. This publication is part of the overall program of the Institute, as endorsed by its Board of Directors, but does not necessarily reflect the views of individual members of the Board or the Advisory Committee.