

III Three Dimensions of Global Market Governance

7 Trade and the Global Network Revolution

Markets undergoing significant technological transformation face questions about global market governance. Technological changes were catalysts that led to the transformation of domestic market policies in the first two ICT eras. Eventually these changes in domestic markets created challenges that existing international market governance could not resolve. One response by governments was to grant more of a role to trade agreements in the global governance of ICT markets.

Initially, trade rules had no jurisdiction over communications and information services. Over time, trade rules emerged and evolved in response to the rise of value-added competition. Governance reflecting managed market-entry arrangements finally were put into place in the Agreement on Basic Telecommunications Services negotiated at the World Trade Organization in 1997. This was a fundamental change in governance.

The introduction of WTO disciplines for ICT service markets altered three features of the global market's governance.¹ First, the major market centers delegated significant power over competition arrangements for global communications to the WTO instead of the ITU. This changed the agenda and the expertise governing the international communications market. Second, the WTO rules, especially in the 1997 agreement, dramatically altered competition rules and property rights in the market, thereby changing its efficiency and the winners and losers in global markets. Later, developing countries made a failed attempt to redirect part of this authority back to the ITU. Third, the first two shifts altered the composition of the expert community influencing global governance. Figuring out how to rationalize and administer a natural monopoly was no longer the central goal. Instead, demonstrated expertise in managing competition policy and trade rules became critically important. The new organizing question was "What is the best way to harness competition to improve consumer welfare while maintaining a framework of strong regulatory guidance?"

Innovations in international cooperation are never perfect. Political choices in global markets with a strong history of monopoly and government control are messy. Our theory suggests several expectations.

First, global transformation requires major change in many important domestic markets. The major players influencing the negotiating agenda shift as domestic political economies evolve. The transformations of the US market were followed, on different schedules and paths, by the reorganization of the European and Japanese domestic markets. Both Europe and Japan ultimately departed sharply from the status quo. The differential speed and policy mixes in domestic transformation set the US up as the “demandeur” for global change and shaped the path of change in the 1980s.² We emphasize the broad political dimension of policy to help explain the logic of switching to delegation to the WTO. Even with fuller convergence in domestic policies during the 1990s, divergences in US and EU domestic political economic institutions still constrained the set of acceptable outcomes.³ Both the United States and the European Union wanted managed-entry governance reflecting their domestic policies, but they differed on particulars whose economic significance nearly crippled the trade initiative. In the end, it took unilateral international action by the US to untangle the impasse at the WTO.⁴

Second, our theory argues that the supply side of governance—the process of negotiation and the logic of delegation—shapes outcomes. In constructing the new global governance even influential countries needed to tailor solutions that conformed to their mutual political interests. The next section explains the negotiating and market challenges of introducing international value-added competition. Broader political considerations informed the decision to explore multilateral trade formats. Then, we examine how the coverage of “basic services,” including phone and fax services, involved still larger challenges. The fourth section explains why choosing to delegate jurisdiction to the WTO instead of the ITU created a set of ground rules that limited the solution set. It was challenging to craft a policy solution that fit the WTO’s requirements and the demands imposed by the US and EU political economies.⁵

Even shrewd international reforms are bound to a strategic context—they solve existing and easily foreseeable problems. If the approach is right, they can evolve, with hard work, to meet new challenges until the policy logic is no longer appropriate. Similarly, until the early 1970s governance of the global monetary system rested on evolving rules and practices designed to shore up “fixed exchange rates” among national currencies. Then, tumultuously, the world shifted to “floating rates.” The final section

considers the impact of the inflection point on the WTO trade rules to ask if major adaptation is necessary.

The Initial Move to Value-Added Competition

For more than a century, regulation hindered global competition for international telecommunications services by creating a cartel through an inter-governmental agreement.⁶ Until the 1960s, monopolists, mostly owned by governments, provided virtually all telecommunications services. In theory, these monopolies could achieve huge economies of scale, undertake expensive research, and cross-subsidize the provision of services for rural areas and the poor.⁷ Therefore, the problem-solving community tried to extend national monopoly across national borders through a cooperative cartel system. Sovereign national control of the monopoly to achieve various policy goals was an important organizing principle. The International Telecommunication Union—the world’s oldest international organization, with roots stretching back to 1865—was the delegated authority to support these arrangements.

When technological innovation altered the economics of the market, the ITU-led system of governance failed to reform to meet these new challenges. An international reform coalition emerged that mirrored the corporate competition coalition in the United States.⁸ These forces promoted a similar set of proposals for global network reforms in most industrial countries. The same sentiment emerged in other industrializing countries that privatized their telephone systems and allowed limited competition in computer services and cellular telephones to attract foreign investment.

Value-added governance at the domestic level tried to reconcile monopoly with limited competition. The ITU’s decision system effectively gave a veto to the many countries and monopolists that were suspicious of even this change. But the United States had the market power and an incentive to catalyze global restructuring. In the early years of data networking, the US acted mainly on its own by using the threat of trade sanctions and other pressure to persuade some major markets to accommodate value-added networks (VANs) and the associated segment of private corporate networks.

Turning telecom into a bilateral trade issue was contentious because traditionally services were outside the competence of trade negotiators.⁹ This was a prime example of supply-side dynamics in governance. Until telecom services became an agreed-upon part of the trade domain,

international negotiations on VANs were difficult because many countries claimed that it was a purely domestic matter or governed by ITU rules. Moreover, there was no clear sense of what framework of trade arrangements could sustain global governance of VANs. Agreement proved difficult to attain. Eventually, the US government worked to incorporate these initiatives into more comprehensive bilateral and regional trade agreements. The North American Free Trade Agreement (NAFTA) followed early experiments with bilateral trade agreements. At the same time, from 1986 to 1994, the Uruguay Round WTO negotiators worked to craft a global agreement on VANs and corporate networks.

In retrospect, the often-contentious negotiations on global governance reform for value-added services may seem oddly disproportionate to the commercial stakes. In 1994, the Web was in its infancy and the international role of value-added services still was tiny. Global communication services revenues slightly exceeded \$500 billion. The international (cross-border) services market amounted to about \$50 billion, more than 30 percent of which involved the United States. The cross-border market consisted mostly of basic “switched services” (phone and fax) that relied on the use of phone switches to deliver services. The global cross-border market for value-added services, including data networking, was small. Precise numbers were never reliable, but it amounted to about 5 percent of the total, approximately \$2.5 billion. But this sufficed to let the US move the equilibrium because it remained the technological leader and the largest market.

In short, the value-added market was less than 0.5 percent of the total world market, but its significance was greater for two reasons. In some countries this was a battle over the computer industry, because until the early 1990s superior computer networking provided a major advantage in the world of mainframe computers. Thus, Japan resisted entry into its domestic market by US VANs to limit the influence of US computer firms, especially IBM. This produced bitter US-Japan bilateral trade confrontations that culminated in agreement on international Value-Added Networks.¹⁰ For developing countries, corporate traffic was an extremely profitable source of high-value traffic because it was delivered under traditional market regulations that inflated pricing. Private corporate networks reduced the potential margins of national post, telegraph, and telephone authorities (“PTTs”). In addition, incumbent carriers such as Mexico’s Telmex worried that value-added services might allow sophisticated customers to “leak” traffic off the public phone network by sending it through their private networks.

National PTTs also resisted value-added regimes because they feared that the rise of private networking threatened their plans for profitable growth, including expanding computer networking on a monopoly model at a stately pace.¹¹ The introduction of VANs predictably created advocates that argued that the old PTTs were incapable of delivering a network with the cost efficiencies and the technical flexibility needed for value-added services to thrive. This happened in Europe when the EU tried this approach.

The trade negotiations over VANs confirmed the PTTs' fears. In the 1980s US trade negotiators, for example, conceded that they could not force foreign monopolies to relinquish their hold on basic services markets or the public network infrastructure. Instead, they pursued the same regulatory measure that prevailed in the United States in the 1970s—guarantees that corporate users could establish or use private networks on terms that would negate the monopoly power of the incumbent phone company. This meant that US trade authorities were classifying certain domestic regulatory practices as unacceptable, a touchy issue for all sovereign nations.

The tension over telecom became embedded in a larger story involving the management of the world economy. To traditional telecom experts, it seemed that “the gods must be crazy” when top economic leaders gambled that changing the global telecom governance would help to achieve a new world trade agreement. The politics of trade policy always is a defining issue for political parties and for national political economies. This is politics at a grander scale than ICT interest-group battles, and ICT got caught up in it.

In 1986 the Uruguay Round of trade negotiations was launched at the Punta del Este, Uruguay Ministerial meeting of the General Agreement on Tariffs and Trade (GATT), the WTO's predecessor. This came after a failed attempt to launch negotiations in late 1982 at a time of global recession and increasing gloom about the prospects for the world economy and the fate of free trade. Many suspected that declining US power would weaken the political glue holding the free trade system together. The Japan-US trade confrontations seemed to augur an era of trade wars. The earlier Tokyo Round negotiations had removed most significant tariffs on goods that industrial countries most wanted to liberalize. With no enthusiasm for liberalization of agriculture and textiles, proponents of free trade needed to find a different agenda to revive the momentum for global trade talks.¹²

One priority was to make the benefits of previous agreements more reliable. This led to the objective of a binding system for resolving trade disputes at the WTO.¹³ Another goal was to create a potent new constitu-

ency for trade negotiations by putting selected items about intellectual property and foreign investment on the negotiating agenda. Above all, the Uruguay Round proposed to make the service industries subject to trade disciplines. Services accounted for the bulk of every industrialized country's domestic economy, and trade in services was growing rapidly. Further, all service markets were inefficient. They were ripe for showing how trade agreements could bolster global growth. In addition, a huge political clientele of service and equipment firms favored the opening of these world markets, thereby boosting political support for the Uruguay Round. Trade policy experts saw telecom as a leading edge issue because, unlike banking, a global deal seemed possible that would convert the general principles of service liberalization into a practical set of market access commitments.¹⁴ Moreover, competition in ICT services was high on the request list of global service companies because ICT was a major cost and performance factor for them.

When the world's trade and finance ministers proposed to transfer authority over ICT services to the GATT, this did not reflect harmonious agreement. The Round's trade in services agenda was an idealistic and politically pragmatic gamble.

Several lessons emerged that illuminated how change unfolds in world markets. Crucially, "original" international jurisdiction over critical aspects of international telecom markets was transferred to the GATT (and later the WTO). Once relocated in that venue, the trading system's rules and negotiating logic-usurped agendas previously administered by the ITU, an organization rooted in monopoly, whose expert community believed that telecom markets were unique and therefore required special treatment. In contrast, trade experts viewed ICT services as just another market; the arcane details might require innovative features for trade deals, but the logic of market liberalization through the GATT still applied.¹⁵

In response to the skeptics, the United States tried something akin to a "proof of concept" for the Uruguay Round by incorporating services into various bilateral and regional free trade area negotiations. This happened in the 1985 US-Israel agreement and in the 1988 US-Canada Free Trade Agreement. Logically, it then became the basis for incorporating services into the NAFTA agenda.

As the Uruguay Round negotiations dragged on, the regional free-trade agreements took on a new significance in the American strategy. NAFTA and APEC (the Asia Pacific Economic Community), in particular, were advertised as alternatives to the conclusion of the Uruguay Round. Washington indicated to Europe that it could live with a failure at the

WTO because it would pursue liberalization through Free Trade Agreements in the fast-growing Pacific Rim. American policy makers predicted that America's deep economic ties around the Pacific would put Europe at a disadvantage. This was a crucial implied threat because the main obstacle to the conclusion of the Uruguay Round was the dispute over agriculture with Europe.

The backdrop to NAFTA was the United States' success in introducing long-distance competition that seemed to augur well for potential competitors to the Mexican incumbent, Telmex.¹⁶ This disparity generated interest in both Mexican and US companies. US firms also were attracted by Canada's data and long-distance telecom markets.¹⁷ The linkage of NAFTA to the Uruguay Round's closing negotiations meant that the US needed comparable concessions in both venues. NAFTA ultimately created bargaining leverage that hastened the Uruguay Round's conclusion. For example, NAFTA gave American and Canadian providers of voice mail or packet-switched services nondiscriminatory access to the Mexican public-telephone network and eliminated all investment restrictions for value-added, enhanced, and packet-switched services. It also required Telmex to provide cost-based access to its network for the competitive (or self) provision of enhanced or value-added services.¹⁸ The NAFTA terms showed that trade liberalization of value-added services was possible between a developed and a developing country. The US thought it important to demonstrate this possibility to the developing world.

For equipment markets, the NAFTA negotiations took place during major industry adjustments and a soaring US trade deficit in equipment and concomitant major adjustments in US labor staffing of telecom manufacturers. The US industry was eager to expand internationally, but faced closed foreign markets. Canada wanted to lock in unrestricted access to the US market. Its main telecom equipment producer, Northern Telecom (Nortel), was a huge, early beneficiary of the breakup of AT&T. The seven original regional Bell operating companies bought heavily from Nortel to lessen their dependence on AT&T's equipment subsidiary, Lucent.¹⁹ NAFTA also eliminated the tariffs on most equipment²⁰ and also assured users of the right to choose equipment attachments without undue interference from phone companies.²¹ This freedom was essential to business users configuring corporate telecommunications and computing systems.

North American liberalization further fueled the demand for a broad agreement on ICT equipment. The largest non-US markets were in the European Union and Japan. The fastest-growing markets were in rapidly industrializing countries. Nortel, Lucent, and other equipment companies

avored global service liberalization because it supported new entrants into foreign markets that were potential customers. As the Internet boom expanded, the impetus for global networking innovation grew and equipment sales expanded. Global networking also facilitated high technology supply chains for manufacturing that persuaded several countries to embrace complementary suppliers of components and ICT equipment. Thus, in the Information Technology Agreement of 1996, the major trading partners in the WTO agreed on simultaneous unilateral liberalization of tariffs on many new forms of network and computing equipment. The agreement, signed by 52 nations, was consistent with a new pattern of intra-industry ICT trade. These equipment supply centers constituted 95 percent of the global demand for the products. Thus, simultaneous unilateral liberalization served the interests of both producer and consumer countries.²²

In short, getting NAFTA to match the Uruguay Round terms reinforced the United States' bargaining strategy. It also served as a proof of concept for liberalization in general and accords with an industrializing country in particular. However, the successful conclusion of the Uruguay Round superseded the NAFTA accords.²³

Achieving Managed-Entry Governance

NAFTA and the Uruguay Round concluded at about the same time. They had similar achievements on telecom equipment and services, but the Uruguay Round was slightly more inclusive than NAFTA. The Uruguay Round further demonstrated that a successful outcome in a networked service industry for multilateral trade policy was possible.

As the Uruguay Round dragged on, a more far-reaching change became conceivable. In the 1980s only a few countries accepted general competition in basic telecommunications services, and even those nations significantly limited competition. By the early 1990s, however, most industrial countries were moving to domestic market-entry rules that reopened questions about the global agenda. Thus, when the Uruguay Round ended in 1994, governments extended the deadline for negotiations on basic telecommunications services. The national differences over adjustment costs to global liberalization nearly sank the talks.

Cross-Border Services

In 1995, international traffic accounted for about 10 percent of the \$500 billion world revenues for telephone services. This amount did not reflect

the real economic importance of international services. The market for international calls and other cross-border telecom services shrouded a lucrative system of monopoly profits. The system's complexities shielded it from critical review. Let us draw back the curtain.

The ITU system for telecommunications services created a set of property rights in international telephone services that produced fundamentally anti-competitive consequences. These rules favored the "joint supply" of international phone services using settlement rates.²⁴ Settlement rates were paid to a country for terminating a call originating in another country. The settlement rate represented the cost of an input to production of an international phone call, just as iron is an input to producing steel. It influenced the pricing of international calling, but did not set the end price for consumers. The lack of competition in the retail market further inflated these prices.

When every country had its own monopoly, the accounting and settlement rate system reflected the property right of the local monopolist to charge for the use of its network and worked against the provision of end-to-end international services with pricing disciplined by a competitive global market. Monopolists often inflated settlement rates to cross-subsidize domestic customers and suppliers of labor or equipment, or simply to pad profits.

The introduction of competition in the United States further inflated the profits from international telephony for many countries. Increased competition in the US drove down international calling prices for its consumers and increased service options, thus stimulating US demand and driving up the volume of calls originating from the US to the rest of the world. With rare exceptions (Finland was one), more calls flowed from the US to other countries than vice versa. This led to a worsening of the imbalance in global traffic, and "net settlement payments" to PTTs became a lucrative source of dollars.

As an illustration of the net settlement payment, suppose the United States sent 10 minutes of calls to Mexico at a settlement rate of 50 cents per minute and Mexico sent the US 5 minutes of calls at the same rate. Then the net settlement payment from the US to Mexico for the period would be \$2.50. To break even, the US carrier needed to recover this \$2.50 payment from its customers (\$0.25 per minute), a significant cost element. Because settlement rates bore little relationship to efficient economic costs, this also represented a large subsidy from competitive markets to monopoly markets. Furthermore, the Federal Communications Commission had to institute special controls to stop foreign monopolists from playing

competitive US carriers off against each other on negotiating settlement rates for terminating their traffic. Although the US devised a clever patch, these FCC rules also weakened competition among US carriers.²⁵

In mid 1997, after more than 10 years of competition, the FCC estimated that the average price of an international phone call from the United States was 88 cents per minute. This compared to 13 cents per minute for domestic long-distance calls. These price differences existed despite negligible differences in the costs of transmission between the two types of calls.

Exorbitant settlement rates inflated prices. In 1996 the average settlement rate paid by US carriers was 39 cents per minute; outside the OECD area and Mexico the average cost for US carriers was more than 60 cents per minute.²⁶ The FCC believed that the efficient cost of termination (the function paid for by a settlement rate) for most countries should not exceed 5 to 10 cents per minute.

In 1995, US carriers sent \$5.4 billion in net settlement payments to other countries. This total reached about \$6 billion in 1997. US consumers paid for this in their phone bills. The FCC calculated that roughly 70 percent of the total net settlement payments represented a subsidy paid by US consumers to foreign carriers. Moreover, changing patterns of international traffic induced by early competition suggested that US net settlement payments would continue to rise.²⁷

The settlement rate issue also delayed the FCC from allowing increased foreign carrier entry into the US market for international phone services, a logical goal for boosting competition. The FCC took even longer to waive US restrictions on foreign investment in basic telecom carriers. In 1995, when the FCC adopted rules to systematize its case-by-case liberalization of US restrictions on foreign investment, the FCC still recognized that bilateral market openings would move slower than was ideal.²⁸ Efforts to prevent foreign carriers from abusing their market power also limited the potential benefits that they could bring to the US market by fostering more competition. Even if the FCC allowed British firms (for example) easier entry into the US market, this would not achieve effective international services competition. The settlement rate system still would need reform. Thus, in 1996 the FCC laid down conditions for "flexibility" under which the FCC would waive the use of settlement rates and other restrictions on international services.²⁹ Although an advance to liberalization, the 1996 rules did not alter the FCC's case-by-case approach to bilateral liberalization; the FCC still had to declare the home market of a foreign carrier to be effectively competitive for international services. This greatly narrowed the potential for flexibility.³⁰ In short, "flexibility" was supposed to under-

mine inflated settlement rates, but high rates limited the use of “flexibility.” This contradiction in policy reflected a strategic market dilemma.

If the FCC made it easier for foreign carriers to provide international telephone services originating from the United States, it could reinforce their incentives to continue monopolies and high settlement rates.³¹ A monopoly or near-monopoly carrier from a developing country, such as Telmex in 1996, could enter the US market and use various devices to increase the flow of international traffic back to their home from the US. This would increase the net settlement payment from the US to its home market.³² If, say, 70 percent of this payment represented a subsidy from US consumers to the foreign carrier, Congress would punish the FCC for permitting a foreign carrier to generate larger net settlement payments.

Meanwhile, large US phone companies were not truly global operations. Their revenues from operations outside the United States provided only a minor share of their total revenue. Thus, they were not prepared to gamble that unleashing all regulatory restrictions would work out well. The consequence of this parochialism was that all major US carriers preferred the FCC to micro-manage the international market to lower settlement rates (and thus lower net settlement payments), rather than approve reforms designed to introduce more sweeping global competition.³³

Changes in technology were eroding the old monopoly telecom system. But in many markets (e.g., textiles, where incumbents rake in huge profits and exercise huge political clout), delays of decades can precede “inevitable” market changes. The price structure of international services could have remained wildly inflated for many years if international service markets did not arrive at a political bargain to back reform.

These political and regulatory challenges led to a branching point for global negotiations. The status quo would liberalize VANs through the WTO and some basic services through bilateral agreements. Or, as a second option, VAN coverage might be expanded upon through a WTO agreement on basic communications services to open foreign entry only into domestic service markets. For example, foreign carriers might provide domestic cell phone carriers, but not international phone services. Alternatively, as a third option, all basic services for domestic and cross-national traffic could be brought into the WTO.

Even the second option was a formidable challenge. At minimum, well-defined property rights were needed to encourage private firms to make the required investment to provide services in foreign domestic markets. Establishing such rights would allow all domestic markets to benefit from inflows of new foreign entrants with money, technology, and management

innovations. Reflecting the domestic policies of industrial countries, trade leaders concluded that such property rights required effective enforcement of competition rights. An independent regulatory authority was needed that was obliged to favor competition. This was a dramatic innovation in trade policy.

The United States concluded that efficient global networks were essential for the ICT revolution. Thus, it was essential to include international services in any agreement.³⁴ Moreover, the US political economy required addressing the link between domestic services and cross-border international services in a WTO agreement. This made inter-governmental action into an all or nothing game: agree on comprehensive new rules for all aspects of the market or rely on ad hoc bilateral agreements that would slow liberalized global competition.³⁵ The differences in the strategic positions and domestic institutions of the US and the EU made the WTO deal difficult.

Domestic Politics and International Markets: The US and the EU

Through the 1990s there was a general political logic to WTO negotiations. Most countries decided on their “best efforts” at commitments in the negotiations only after they observed what US-EU talks yielded. No sensible country would table major concessions before knowing what the two most active trading powers could agree on. This was the case for the basic telecom negotiations. EU and US negotiators reminded each other that if they did not agree on their “best offers” on a timely basis, there would be insufficient time to solicit better offers from other countries.³⁶ Progress depended on the two protagonists.

US and EU preferences reflected their domestic political economic institutions and their international strategic positioning. Domestic political economy led both to prefer some form of managed market entry. But their distinctive international positions led them to different calculations about the cost of switching from the status quo. Moreover, the US and EU political institutions faced different challenges for making credible promises on trade liberalization.

The US accounted for nearly one-third of international traffic flows. Its large, diverse exposure to the international telecommunications market meant that it confronted international telecom competition issues that had barely surfaced or registered elsewhere. The US therefore insisted that international services be part of any WTO agreement, and sought liberalization from large developing markets where international phone services were growing rapidly.³⁷

In contrast, the EU preferred to handle international telephony issues matters with EU directives, not WTO talks. The EU members' international traffic was mainly intra-European, and fell under the jurisdiction of EU directives. Unlike US carriers that paid billions of dollars to foreign carriers in settlement payments, the EU made only modest net payments outside Europe. Therefore, the EU viewed the global negotiations as a way to secure unconditional access to the US market. Its secondary objective was to obtain something close to that in Japan. As a result, the EU did not consider developing countries as crucial to the success of the talks.

The variations between US and EU domestic institutions buttressed these international differences. In the US, the division of powers and the logic of congressional politics raised three critical issues. In each instance the EU embraced a different position.

First, the division of powers in the US meant that the EU questioned the credibility of the US commitments, particularly on foreign investment.³⁸ The US strategy relied on the FCC using its legal discretion to lift restrictions on foreign investment, and did not seek congressional legislation to implement a WTO agreement. The EU team cared more about how to judge the reliability of this commitment than anything else.³⁹ The division of powers between the EU and its member states also created a credibility problem that worried the US. Washington feared that EU commitments on telecom liberalization would not be implemented reliably by national governments. The US pushed successfully to remove any exceptions to full liberalization by large EU members on January 1, 2008.

Second, congressional incentives for foreign policy and international trade decisions shaped the US negotiating agenda. Congressional politics mean that US negotiating teams need a large package of concession to win congressional backing.⁴⁰ A small deal could not generate enough political interest to protect it against entrenched congressional skeptics of trade. Although the US crafted a strategy that avoided the need for legislative approval, if Congress were opposed, the FCC would not undertake sweeping regulatory changes. The Office of the US Trade Representative also would lose congressional backing for the rest of its trade agenda if the FCC forged ahead regardless of political criticism. This political strategy required three accomplishments: (1) The US negotiating team needed significant concessions from the industrializing countries of Asia, South America, and Eastern Europe. Otherwise, Congress would reject a deal that opened the US market without adequate coverage from all major markets. It did not have to show breakthroughs with most poor countries. (2) The agreement had to lower the price of international phone services. This was a

significant benefit to trumpet to the press. (3) The agreement had to credibly protect long-distance carriers from anti-competitive behavior by foreign carriers entering the US market for international services. Congress required long-distance carriers to at least register cautious approval. A strong vote of “no confidence” would signal that the WTO deal was suspect. Thus, domestic politics made the US negotiating team push for a “big deal” providing comprehensive global reforms and winning commitments from virtually every significant market. In comparison, the EU trade negotiation process was less obsessed about external commitments. It focused at least as much on negotiations among European states over the organization of the internal market and on the powers delegated to the EU. The larger and more complicated the WTO deal, the tougher was the internal market negotiation process. So the EU would accept a more limited deal than the US.

Third, the special problems posed by international telephone services exposed how domestic institutions shaped regulatory options. At the WTO the US often advocated preemptive controls to curb these problems. EU negotiators always responded that such measures might diminish the rights of European carriers entering the US market. The EU argued that the US should act against problems only after they surfaced. Whatever the intellectual merits of the EU’s view, it ignored the realities of the regulatory process in a country with highly divided powers, such as the US.⁴¹ The FCC must go through a lengthy investigation, rulemaking, and enforcement procedure before intervening in the marketplace.⁴² US carriers believed that problems were inevitable, but any FCC response was likely to be too late if it waited until a problem arose.⁴³ Divided powers led to a US preference for a WTO deal that authorized specific measures to prevent problems in the international services market over ad hoc enforcement to correct market distortions.

Although the division of powers shaped the US negotiating options, EU bargaining positions reflected the delegation of negotiating authority from member states to the EU, an overriding imperative to stifle unilateral US trade initiatives, and the need for internal bargaining over external commitments. These three factors led the EU to prefer limited multilateral arrangements that would stifle US unilateral forays.

The EU occupies a unique space in international trade diplomacy: it bargains as a single unit in WTO negotiations but lacks authority for unilateral initiatives outside trade negotiations. The EU thus prefers multilateral trade negotiations to unilateral initiatives, in which it lacks authority. The potential of multilateral agreements to hamper US unilateralism in

trade added further impetus to EU support for a multilateral agreement housed in the WTO. Finally, a trade agreement opening the US market also made it easier to get member states to agree to internal market reforms in Europe.

The nature of internal EU politics and international strategic positioning reinforce this jurisdictional point. EU positions in trade negotiations are as much about external negotiations as about achieving internal agreement on a negotiating stance. Altering negotiating positions quickly and on ad hoc basis raises internal problems of re-negotiation.⁴⁴ The need for internal agreement on external positions means that the larger and more complicated any WTO deal, the tougher the process of internal market negotiation.

A final issue for the negotiation was credibility of commitments to enact pro-competitive regulations that would, for example, force incumbent phone companies to share or rent their network facilities to newcomers. Every country had rigidities remaining in their domestic markets that limited competition. The US was just unwinding local monopolies on telecom facilities. The EU had incumbents where governments still controlled large equity holdings and politically powerful workforces. In the US, federalism limited central government power. In the EU, the complicated inter-governmental division of authorities raised major issues about the credibility of promises to regulate in ways that curbed incumbents' market power.

Ultimately, both sides thought, perhaps wrongly, that the analogy to long-distance service competition in the US was accurate. If held strictly accountable, governments had the legal authority and know-how to compel incumbents to cooperate enough with new entrants to spur competition.⁴⁵

The WTO Agreement

The WTO pact on basic telecommunications services nearly fell apart because of the way the political economy of the major negotiators interacted with the rules governing the WTO.⁴⁶

Negotiations before 1997

Until early 1996 the negotiations showed promise but were incomplete. There was a good beginning, a remarkable achievement, and one huge stumbling block. The promising beginning was on national commitments to liberalize markets, although only OECD states made strong offers of

market access. The achievement was on the reference paper of Pro-Competitive Regulatory Principles. What was problematic was the treatment of international services.

Countries that were committed to managed-entry governance at home led the negotiation. They did not accept the notion that a government should remove legal barriers to entry and see what happened (keeping antitrust action in reserve if something went wrong). Many governments placed specific limits on competition. Japan, for example, designated how many entrants could participate in particular market segments. Others retained ownership shares of the old monopolies and cobbled together elaborate bargains to protect the current labor forces of these companies. All the negotiators believed that government sometimes needed to micro-manage the early stages of competition to make entry practical.

Between 1994 and 1996 the WTO negotiations produced a revolution in trade policy. A group of nations produced a “reference paper” that stated critical competition principles and specified how an independent regulatory authority operating transparently should uphold competition. They distilled the essence of the major regulatory regimes of countries that had or were about to introduce competition. Then, countries were asked to “schedule” the reference paper as an additional WTO commitment on market access for basic telecommunications services. Nothing quite like it existed in trade policy; it represented a “manual” for how to judge competition policy in a country. Agreeing on the document proved politically difficult, but once it was widely endorsed it became a credible signal to the ITU and to the poorer countries. They finally had a measuring stick of what the top industrialized and industrializing countries judged to be efficient market management. Even countries that made few or no WTO commitments during the negotiations began to use the reference paper as a starting point for discussions in changing their markets unilaterally.⁴⁷

The issue of international services deadlocked the negotiations in 1996 and required an extension of the talks until February 1997.⁴⁸ The negotiations were hung up by questions about to what degree foreign carriers faced competition in their home markets and to what degree settlement rates were significantly higher than efficient economic costs. The former determined whether the foreign carrier could use control of its bottleneck network facilities at home to employ anti-competitive tactics; the latter determined the financial significance (and thus the financial incentives) of anti-competitive tactics.

Everyone in the informal WTO negotiating group on international services saw no problem if countries just opened their markets to carriers

from countries that permitted general competition in all communications services subject to regulatory safeguards. But here the logic of delegation worked with a vengeance. The WTO would lose its credibility if it ignored its “most favored nation” rule.⁴⁹ Any commitment to open the US market to international traffic and carriers from Europe and Japan also automatically opened it to WTO countries with monopolies.

The United States floated several ideas about how it could distinguish between regulation of carriers from competitive and uncompetitive markets. But no country accepted this kind of national discretion for fear that it would weaken the central WTO principles of most favored nation and national treatment.⁵⁰ The US withheld its support from the WTO agreement because of this impasse, and the negotiating deadline had to be extended beyond April 1996. Multilateral negotiations could not achieve a US-EU consensus on how to restructure rules for the world market.

The 1997 Solution

In mid 1996, when negotiations resumed, some European governments quietly suggested that if a WTO pact could be agreed upon, the EU could create counterpart rules to the FCC’s “flexibility order.” Parallel regulatory action by the two trading powers would amount to a tacit back-door initiative to complement the multilateral trade deal.

The United States remained skeptical for two reasons. First, the industrializing countries, where international traffic growth was greatest, typically delayed the introduction of competition for 3–7 years in their WTO commitments. Second, many poorer countries made weak WTO commitments or none at all. The “most favored nation” obligations of industrial countries on international telecom services made getting post-WTO competition in international services more difficult because developing country carriers could plausibly generate higher net settlement payments once they had unilateral access to the US market. Why would they abandon their monopoly and high settlement rates under these circumstances?⁵¹

In 1996 the United States reluctantly decided that it might have to revert to bilateral liberalization, but the next year it hit upon a third path. It decided it could accept a WTO pact if two conditions were satisfied.⁵² First, Europe had to join the US in making a final major push to improve the market opening commitments of industrializing countries. Second, the EU and other industrial countries had to accept that the US would undertake a unilateral regulatory action outside the WTO. This initiative—dubbed “benchmarks”—would apply to all countries. It was designed to knock the

underpinning out of inflated settlement rates. The US government declared that it would not negotiate this regulatory measure at the WTO, but it pledged that the new policy would meet the WTO obligations requiring competition regulations to honor the principles of “most favored nation treatment” and nondiscrimination. If not, other countries could challenge the policy under the new WTO telecom rules. After the EU agreed to this tacit compromise, Brussels and Washington together quickly won significant improvement in the WTO commitments by several important industrializing countries.⁵³

The US unilateral regulatory initiative caused a sensation because it directly targeted settlement rates. The benchmarks were price caps (legal limits on the maximum price) on the level of settlement rates that US carriers could pay to terminate their international traffic in other countries. Levels varied because calculations showed that poorer countries had higher costs for terminating US traffic.⁵⁴ Benchmarks were designed to remove the bulk of the economic rents that could fuel anti-competitive behavior in the market. They also were intended to lower the net settlement payments for US carriers, thereby easing the financial sting of imperfections that existed in the WTO arrangements.

Benchmarks required an extraordinary level of coordination between the FCC and the Office of the US Trade Representative (USTR). But the agency leaders (Reed Hundt at the FCC and Charlene Barshefsky at USTR) saw the larger economic and political story clearly and agreed to make the effort. As a result, benchmarks solved a policy and political problem for the US related to international phone services and allowed the US to accept a WTO deal. The combination of lower settlement rates and more competition in world markets also helped lower the price of international phone services, a major policy and political goal.

Ultimately, 69 countries, including all the OECD member states, signed the WTO pact. Commitments on opening markets covered about 85 percent of the world market for basic domestic and international telecom services. For all OECD countries except Korea and Mexico, the commitments covered almost all forms of domestic and international telecommunications services. The commitments included guarantees of foreign investment rights for new entrants. All signatories also agreed to a set of “pro-competitive regulatory principles” that created obligations for how national regulators would protect new entrants from anti-competitive behavior by incumbents with market power.⁵⁵

These advances allowed the FCC to rule that easier entry into the US market was now in the public interest because US carriers would gain rights

in all major industrial markets. Simultaneous opening of the major industrial markets helped liberalize FCC rules on foreign entry to permit 100 percent indirect foreign ownership of US common carriers employing radio spectrum.⁵⁶ It was no longer necessary to rely solely on piecemeal bilateral liberalization. In short, the WTO pact was a remarkable achievement, but did not by itself solve all the problems of cross-border networks and services.

Assessing the New Rules

Did the WTO agreement induce a real global market change? Change already was underway in the largest industrial markets. In these countries the WTO helped produce a better way to efficiently open markets to foreign investment and cross-border networking. It steered the world away from lengthy, bureaucratically complex bilateral reciprocity negotiations. This was a major net benefit that accompanied the shift to competition in the OECD nations. Note, however, that this system continued to support some aspects of a managed market-entry regime.

The pact also accelerated the speed of market reform in industrializing countries in the short term and in poorer nations in the medium term. The forays of poorer countries into competition had often been more limited than in OECD countries. The WTO negotiations, and complementary diplomatic activities, let industrial countries focus the attention of multinational users of advanced communications services, the international financial community, and telecommunications investors on the decisions of these industrializing countries.⁵⁷ Industrializing countries came to recognize that their reputations as a host to communications investments were tied to their WTO positions. WTO negotiators had created a set of market opening and regulatory commitments that approximated a standard for judging whether national policy dealt adequately with the emerging global realities. Telecommunications policy officials in these countries were charged with attracting billions of dollars or euros in investment capital to upgrade their communications infrastructure. In time they accepted that a WTO commitment would provide property rights for foreign investors and new market entrants that would bolster the credibility of their pledges to achieve a modern communications infrastructure.

Political games continued. For instance, Mexico often adjusted its policies to accommodate the concerns of Telmex, Mexico's most influential company. This prompted a high-profile dispute with the United States over

Mexico's effort to forbid "flexibility" on international traffic and retain the use of settlement rates that continued until a WTO ruling favored the US.⁵⁸ Still, a new dynamic emerged where newly privatized carriers from industrializing countries that suddenly were facing competition at home became multinational firms expanding across their regions.

After 1997 an accelerating tide of market reform swept across poorer countries. Early market reforms often privatized monopolists without introducing competition. Awareness increased that it was preferable to tightly couple privatization and competition. China and India have embraced competition, following the lead of Hong Kong, Singapore, Korea, and Taiwan and then Thailand, Malaysia, and even Indonesia. A few Latin American countries, including Chile, embraced significant competition. Many settled for markets characterized by de facto duopoly or regulatory schemes that so segmented markets that it sapped much of the potential for competition.

Africa moved more slowly. Even some sub-Saharan Africa countries, once bastions of resistance to competition, now regularly cooperate with the development banks on introducing competition regimes that conform to WTO principles even if they have not scheduled WTO commitments.⁵⁹ Still, in South Africa, in March 2008 the government still owned almost 39 percent of Telkom, the wireline monopoly, and its newly licensed national competitor, Neotel, did not launch test service until the summer of 2007. The cost of broadband Internet access in South Africa is among the highest in the world, exceeding prices in Morocco, Egypt, Botswana, and Mozambique. In frustration, Capetown and Johannesburg plan to construct municipal broadband networks to provide less expensive services than available from Telekom.⁶⁰ Despite all these imperfections, African-owned mobile wireless operators now compete with each other across Africa. Similarly, in Bolivia, one of the poorest countries in South America, ownership of a cell phone is no longer considered a sign of having escaped poverty. Cell phone ownership and use costs only \$4 per month, a price within the reach of the poor. Even limited competition has made connectivity more available.⁶¹

Numerous restrictions on the number of competitors and the terms of competition remain. Governments retain large equity stakes in old monopolists and limit the number of licensees to ensure the financial viability of new competitors. They maintain pricing rules that hinder competitive innovation. Moreover, communications ministers in India and in other countries with parliamentary governments continue to override telecom regulators in ways that blunt their effectiveness. Other countries, including

China, still lack any semblance of an independent regulator. Still, most countries are moving toward an independent regulator with reasonable power. These emerging regulators increasingly rely on transparent decision-making procedures, gather evidence on proposed decisions through public comment, and then issue a written record and justification tied to the final decision.

When the largest supplier and user markets for ICT embraced global markets, the consequences for global governance was huge. Their support empowered the WTO to promote global competition and market integration. Nominally, developing countries have an equal say at the WTO, but in practice it takes a large block of cooperating developing countries or the leadership of those with growth markets to make a difference. In the 1990s, most developing countries were indifferent to the WTO telecom negotiations, because they did not see any benefits to their economies (as support for monopolies was still strong) and because industrial countries were so focused on commitments from a few of its economic leaders. However, the rise of the WTO provided a powerful signal to the ITU that its main financial contributors no longer would tolerate the ITU's antagonism to competition and trade reforms. The ITU's mindset shifted significantly by 2000. In effect, wealthy countries sanctioned the ITU by stripping away some of its authority.

After the close of negotiations on the WTO pact and the US benchmark initiative on settlement rates, some developing countries continued to press to return the authority over international services to the ITU. This came in two forms. When the FCC imposed benchmarks in August 1997, the backlash showed that many developing countries preferred to maintain the old system.⁶² They lobbied to allow the ITU to produce its own benchmarks as an alternative to the FCC formulation. The draft ITU proposals that emerged would have yielded only minimal changes in the level of settlement rates. For that reason, the US rejected this plan out of hand, and most of the OECD countries quietly concurred.⁶³ A more serious attempt, supported by some smaller industrial countries (e.g., Australia) that believed that they were at the edge of the Internet, pursued an effort to recast the ITU as a central actor on the prices charged for the international exchange of data traffic serving Internet Service Providers (ISPs) while accessing the World Wide Web. As of 2008, this effort has produced no result except much discussion and a few international resolutions of dubious value. The major markets so far have treated the exchange of Internet traffic as a matter of competition policy within the confines of the WTO reference paper.⁶⁴

Meanwhile, the record on market changes on international and domestic services is striking.⁶⁵ In general, privatization combined with competition has enhanced investment, lowered prices, and improved connectivity in developing countries.⁶⁶ The prices for international telecommunications services have plunged, and this has not harmed the growth of connectivity in developing economies. Indeed, the ITU reports that there were 1 billion telecom subscribers around the world in 1997, 2 billion by 2001, nearly 3 billion in 2004, and 4 billion in 2006, the increase due mainly to huge increases in connectivity in developing countries.⁶⁷ At the same time, as figure 7.1 shows, the market for international computer and information services has soared.

Gaps, Possibilities, and New Realities

Weaknesses and omissions in the governance change anchored around WTO innovations persist. These reflect the character of the political economy of managed market entry systems in the 1990s.

The WTO pact and negotiating history suggest two significant guidelines for any future discussion of the governance of the ICT sector. The first is that in the arcane legalities of trade law the WTO negotiators forged a sophisticated mechanism to allow nuanced commitments over many aspects of trade, investment and domestic regulatory policies. In short, they invented tools allowing sophisticated distinctions about what countries agree to do as trade obligations, and what they do not agree to. This potential for meaningful distinctions in a standardized format let countries agree to do more on a selective basis than they would have undertaken otherwise. Second, the WTO found a way to achieve substantial regulatory harmonization of specific telecom services on a global level that was enforceable through trade dispute remedies. The market access commitments of WTO members and the regulatory principles endorsed in the pact to support them were intentionally cast to win consensus and be adaptable over time. The negotiators created basic regulatory principles instead of detailed rules. For example, a country must address issues related to the market power of a dominant carrier, but there is no requirement of unbundling the local network transmission network. Countries are accountable for achieving the principle, not a precise policy package.

There is no reason why the WTO could not revisit the reference paper to harmonize other policy principles that are relevant to achieving the inflection point. Enforceable, selective harmonization of regulations is a powerful tool for changing global governance. Furthermore, the WTO's

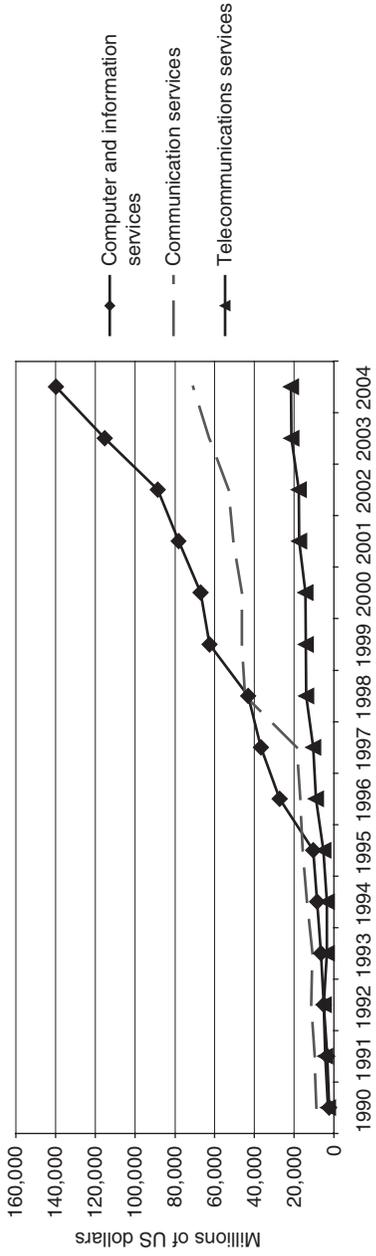


Figure 7.1 Growth in revenues from trade in computer and information services, communication services, and telecommunications services, 1990–2004. Source: OECD Communications Outlook 2007.

Appellate Body, in its decision on the “Internet Gambling” case (a dispute over US regulations restricting gambling on the Internet), suggested an important precedent. When a country opens a sector for cross-border market access under the General Agreement on Trade in Services (the specific legal framework in the WTO that serves as the umbrella for service agreements like the one on basic telecommunications), foreign Internet-based services can enter the market and demand that any services barriers including filters, bans, or other rules be justified or eliminated.⁶⁸ The Appellate Body’s recognition that GATT obligations evolve to fit changes in technology is likely to make the WTO a receptive forum for addressing Internet services issues.

Change also brings big challenges. The first challenge is the changing composition of domestic telecom governance because of the inflection point. A large regulatory divide has emerged between the US market and many major countries. Over time this could create stress.

One source of tension flows from specific policies that reflect the differences in national network infrastructure. The United States now has two wired broadband infrastructures, and wireless technologies might evolve into additional national networks. Most European and Asian advanced economies have one infrastructure and use detailed rules on network sharing (unbundling rules) to spur competition, as the US once did. They are achieving lower prices and higher speeds than US networks in many cases, but they are subject to detailed government oversight.

Another source of tension is the philosophical difference over the likelihood that companies controlling a technology platform will have the incentive and ability to use it for anti-competitive purposes. Washington has grown more skeptical that there is a threat to competition while other industrial countries have concluded otherwise, believing that the ability of US firms to manipulate these technology platforms is critical to their continuing dominance over ICT markets. Thus, some other industrial countries have extended their anti-competition oversight from telecom networks and software operating systems to careful scrutiny of the kinds of Web-based platforms emerging at the inflection point. This split in the premises of competition policy could hamper efforts to find global rules for many of the largest market developments before 2025.

There also are huge gaps in global governance as a result of the limits of governance in the era of managed entry. Managed-entry governance made limited progress on competition in audio-visual services in most countries. Predictably, a conspicuous shortcoming of the WTO process was the governments’ decision to withhold practical jurisdiction of over most audio-

visual services (media content and broadcast) from the WTO. France and other countries demanded that “cultural” industries be excluded.⁶⁹ As convergence proceeds, the lack of trade commitments allows the potential for the creation of barriers to the free flow of audio-visual products and services. In short, without an obligation to offer market access to broadcast, or broadcast-like services on the Internet, governments are free to erect new barriers to uses of ICT. The EU is attempting to tackle this by distinguishing between “linear” and “non-linear” services. Using this logic, a television broadcast program webcast over the Internet would be considered a linear service and, thus, subject to broadcast service rules. Conversely, a television program accessible to consumers through a search engine would be considered a non-linear service and, thus, not subject to broadcast rules.⁷⁰ Such distinctions are difficult to maintain in the modular “mix-and-match” design of modern Web services.

Equally troublesome is the ambiguity of trade coverage for Internet services. The emergence of the Internet was just taking place as the WTO pact was forged. In the mid 1990s the negotiators were advised by technologists that voice service over the Internet would never approximate the clarity of voice sent over the circuit-switched network. Today, efforts to block Internet telephony (“VoIP”) or to make it conform to the precise rules and pricing schemes of traditional phone services show the ambiguity of trade treatments of packet-based services. More broadly, the gaps between the jurisdiction of the WTO and the ITU are sufficiently vague to fuel a heated global debate over what forum is best suited for a discussion of Internet governance. This new space is also contested.

Finally, the WTO regulatory principles tiptoed around some difficult technical issues. The WTO agreement adopted weak provisions on property rights and governance systems for radio spectrum. These decisions could be important for future ICT infrastructures. Can these trade arrangements evolve to advance a system emphasizing trading rights? Everyone recognized that governments could manipulate how they allocate and assign spectrum or set standards for wireless licensees in ways that distort competition. There also was acknowledgment that existing WTO rules (in the Agreement on Technical Barriers to Trade or the Standards Code) already provided trade rules on standards-related matters. However, there was concern that trade lawyers should not complicate the tasks of spectrum engineers in national government who had the unenviable task of balancing complex national interests from defense, civil aviation, law enforcement, and commercial uses of spectrum. For this reason, trade provisions on spectrum policy provisions tend to use relatively guarded terms—e.g.,

requiring policy measures that might restrict foreign market access to be “least burdensome” and “competitively neutral.” These strictures are useful, but are far short of trying to raise the minimum bar on how to allocate and assign spectrum in a more market efficient manner. Yet spectrum is essential to ICT infrastructure innovation. Thus, enormous tension exists between the most innovative national regimes for spectrum policy and the traditional ITU process. These tensions are heightened by the fact that spectrum and standards policies are among the last bastions for industrial policy. The resulting mismatch between the direction of technological trends and policy practices are producing huge challenges for the evolution of wireless ICT infrastructures.

The substantive weaknesses in trade agreements for ICT could be compounded if US support for trade and investment integration through bilateral and multilateral pacts slackens. If disillusionment with trade deals pre-empts the American agenda through 2025, then policy entrepreneurs would have to delegate problem-solving to other venues. This might include voluntary harmonization of domestic regulatory arrangements among important markets. If the agenda for trade changed, it is equally possible that the political prospects for trade agreements might improve. Thus, a compelling new trade agenda might include balanced responses to worries over the social and environmental impacts of economic change. Complementing these changes, a bolder approach to tackling the issues facing the global ICT infrastructure through trade agreements might strongly engage the political commitment of producers and large users of ICT to new trade deals. The current WTO round is, in many respects, a timid exercise in terms of tackling the larger problems confronting the world economy. The time may be ripe for a different approach, especially in light of the failure in July 2008 to reach an agreement on concluding the WTO Doha Round of trade negotiations.