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Volume 23
Number 4 *Symposium: International Taxation*

Article 2

10-1-2001

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Johan Deprez, *The Telecommunications Industry in the Information Age: A Case Study in Globalization, Deregulation, and Tax Competition*, 23 Loy. L.A. Int'l & Comp. L. Rev. 537 (2001).

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The Telecommunications Industry in the Information Age: A Case Study in Globalization, Deregulation, and Tax Competition

JOHAN DEPREZ*

I. INTRODUCTION

Telecommunications is a dynamic industry, experiencing significant changes in technological capabilities, market access, and entity structure. It is rapidly changing due to the process of globalization and international integration, as well as the computer and related technological revolutions. The telecommunications industry, therefore, is a fascinating case study of industry dynamics in the information age at the beginning of the new millennium. As the process of globalization advances, the nature of tax competition between jurisdictions is becoming a more important tax policy issue.

This Article analyzes the impact of tax incentives and competition on the changes in the telecommunications industry. There is significant literature that questions whether tax incentives and competition are

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beneficial to the economies of the countries providing the incentives, and whether these incentives stimulate transnational corporations to carry out investments that would not exist otherwise.¹ For example, the International Monetary Fund (IMF) "maintains a widely held view that tax incentives of all sorts have proved to be largely ineffective, while causing serious distortions and inequities in corporate taxation."² On the other hand, others argue that tax incentives are important to stimulate investments and determine their placement.³ This Article concludes that tax incentives are playing an important role in shaping the dynamic development within the telecommunications industry.

In order to understand the effects and vigor of tax competition, this Article first explores the broader context of globalization. Too often tax policy discussions are carried out on a theoretical basis that is devoid of historical and institutional context.⁴ Some scholars, however, are discussing the important link between globalization and tax competition.⁵

Part II of this Article discusses the context of globalization, and explains how this context may be divided into identifiable phases. Part III describes the key recent developments within the telecommunications industry, and how these developments fit within the general pattern of globalization. Part IV describes how international tax competition fits into the globalization process. Emphasis is placed on the recent attempts at international tax coordination and the issue of

1. See Reuven S. Avi-Yonah, *Globalization, Tax Competition, and the Fiscal Crisis of the Welfare State*, 113 HARV. L. REV. 1573, 1641-46 (2000) (noting that some economists argue that developing countries should engage in the ultimate tax competition by refraining entirely from taxing foreign investments, whereas others advise developing countries not to engage in tax competition at all by not offering incentives to foreign investments).

2. Janet Stotsky, *Summary of IMPF Tax Policy Advice*, in TAX POLICY HANDBOOK 279, 282 (Parthasarathi Shome ed., 1995).

3. Michael J. Boskin & William G. Gale, *New Results on the Effects of Tax Policy on the International Location of Investment*, in THE EFFECTS OF TAXATION ON CAPITAL ACCUMULATION 201, 202-03, 214 (Martin Feldstein ed., 1987); James R. Hines, Jr., *Lessons from Behavioral Responses to International Taxation*, 52 NAT'L TAX J. 305, 305 (1999); see also Eric Bond, *Tax Holidays and Industry Behavior*, 63 REV. ECON. & STAT. 88 (1981).

4. The importance of explicitly addressing the historical and institutional context of an economics issue is forcefully advocated by only certain segments of the economics profession. See Alfred S. Eichner & J. A. Kregel, *An Essay on Post-Keynesian Theory: A New Paradigm in Economics*, 13 J. ECON. LITERATURE 1293, 1294 (1975).

5. Michael A. Livingston, *Blum and Kalven at 50: Progressive Taxation, "Globalization," and the New Millennium*, 4 FLA. TAX REV. 731, 742-44 (2000) (postulating that globalization encourages tax competition and discourages progressive taxation); see also Avi-Yonah, *supra* note 1, at 1575-79 (arguing that globalization creates tax competition that may create a serious social backlash).

“harmful” tax competition. Part V analyzes the impact of tax competition on the telecommunications industry.

Part VI evaluates which tax policies have been effective in positively influencing telecommunications investment and what general lessons may be drawn for developing efficient tax policy regimes. In order to effectively analyze these central issues, specific reference is made to the tax policies of two geographically diverse jurisdictions: Ireland and Singapore. Emphasis is given to the “Irish model,” which has successfully attracted players in the telecommunications and related industries. Finally, Part VII mentions future challenges facing the telecommunications industry.

II. THE CONTEXT OF GLOBALIZATION

Globalization is an evolving process. Its modern origins trace back to the dislocation, protectionism, and misery of the Great Depression. The process of globalization can be divided into three phases, encompassing (1) a breaking down of traditional trade barriers, (2) deregulation and privatization, and (3) international coordination.

A. Globalization and International Economic Integration: A Brief History

The Great Depression greatly reduced the level of international economic relations,⁶ which, in turn, exacerbated the worldwide depression.⁷ The resulting Second World War strongly reinforced the low level of economic interaction.⁸ During the Second World War, at Bretton Woods, the Allies and a number of other countries developed a plan to resuscitate and restructure economic relations between countries.⁹ Out of the Bretton Woods agreement, the IMF, World Bank, and a fixed-exchange rate system were created.¹⁰ This economic structure, however, gave substantial representation to only a few member-nations.¹¹

6. See CHARLES P. KINDLEBERGER, *THE WORLD IN DEPRESSION: 1929–1939*, at 117–41 (1986).

7. See *id.*

8. See *id.* at 278–84.

9. See *id.* at 284–87.

10. Geoffrey G.B. Brow, *The Tobin Tax: Turning Soros into Plowshares?*, 9 TRANSNAT'L L. & CONTEMP. PROBS. 345, 349–52 (1999) (giving a brief history of Bretton Woods and its creation of the IMF, World Bank, and a fixed exchange rate system).

11. The voting power in the IMF and World Bank, in contrast to the U.N., is highly skewed in favor of the rich countries. The United States, Japan, Germany, France, and the United Kingdom combine for 40% of the votes of the 183 nation-members in the IMF. See International

The Bretton Woods era was a period of strong international growth, prosperity, and economic stability.¹² For example, between 1950 and 1973, total real GDP grew at an average of 5.9% for Organization of Economic Co-Operation and Development (OECD) countries, and at 5.5% for developing countries.¹³ After the breakdown of the Bretton Woods Agreement and a shift in favor of flexible-exchange rate systems, there has been a general slowing of economic growth as well as a divergence of growth rates. New industrialized countries' real GDP grew at a 3.5% annual rate from 1973 to 1990, while growth in major industrialized countries dropped to 2.5%.¹⁴ These growth rates, while significantly lower than those during the Bretton Woods period, compare favorably to the average annual negative growth rate of 0.1% for developing countries.¹⁵

The Bretton Woods system broke down at the end of the 1960s and early 1970s.¹⁶ This breakdown was due to the accumulation of U.S. dollar reserves held outside the United States, built-up trade imbalances, speculative pressures, and the August 15, 1971 decision by the American government to stop the convertibility of U.S. dollars into gold.¹⁷ A key outcome of this breakdown was the replacement of the fixed-exchange rate system pegged against the U.S. dollar with a flexible-exchange rate system. The resulting "exchange rate uncertainty" became an important consideration for transnational corporations and other international economic actors.¹⁸ Under the

Monetary Fund, *IMF Members' Quotas and Voting Power, and IMF Governors*, Mar. 29, 2001, at <http://www.imf.org/external/np/sec/memdir/members.htm>. In the World Bank Group, these same five countries cast 37.6% of the votes in the 182-member International Bank for Reconstruction and Development (IBRD) and 41.58% of the votes in the 161-member International Development Association (IDA). See THE WORLD BANK ANNUAL REPORT 2000, EXECUTIVE DIRECTORS AND ALTERNATES OF THE WORLD BANK AND THEIR VOTING POWER 119 (2000), available at http://www.worldbank.org/html/extpb/annrep/pdf/appndx/wb_a2.pdf (last visited Mar. 15, 2001).

12. Paul Davidson, *Global Employment and Open Economy Macroeconomics*, in FOUNDATIONS OF INTERNATIONAL ECONOMICS: POST KEYNESIAN PERSPECTIVES 9, 21-23 (Johan Deprez & John T. Harvey eds., 1999).

13. *Id.* at 22.

14. *Id.*

15. *Id.*

16. See *id.* at 23.

17. Paul Deprez & Johan Deprez, *The Monetary Dynamics of Economic Integration*, in DYNAMICS OF GLOBALIZATION AND DEVELOPMENT 65, 70 (Satya Dev Gupta & Nanda K. Choudhry eds., 1997).

18. See PAUL DAVIDSON, INTERNATIONAL MONEY AND THE REAL WORLD 83 (2d ed. 1992) (defining exchange rate uncertainty as exchange rates having the ability to vary and expected to do so in an unpredictable fashion).

modern flexible-exchange rates system, speculative activities of currency traders, rather than the trade requirements of corporations, drive the fluctuations in the currency exchange rate, which can reach extreme levels of volatility.¹⁹

World trade grew very rapidly in the last half of the twentieth century.²⁰ This internationalization of economic relations was not only achieved on a global basis, but also on a regional basis. An example is the decades-long and ongoing process of creating the European Union (EU). In 1957, the Treaty of Rome establishing the European Economic Community (EEC), the predecessor to the EU, focused on trade and the free circulation of goods, services, capital, and labor.²¹ Driven by the breakdown of Bretton Woods, European integration expanded to include monetary unification and the establishment of a common currency, the Euro.²² Regional economic integration also finds lesser-developed examples such as the North American Free Trade Agreement (NAFTA).²³

A driving force behind globalization has been the different rounds of the General Agreement on Tariffs and Trade (GATT), which has now morphed into the World Trade Organization (WTO).²⁴ The first GATT was signed in Geneva in 1947 (GATT 1947) and focused on lowering custom duty rates and other barriers to the trade of goods.²⁵ Further opening of trade occurred via the Tokyo Round (1973 to 1979) and the Uruguay Round (1986 to 1994).²⁶ The WTO was established on January 1, 1995, via the Uruguay Round of negotiations and currently has 140 member countries.²⁷ The WTO goes beyond the scope of

19. John T. Harvey, *Exchange Rates: Volatility and Misalignment in the Post-Bretton Woods Era*, in FOUNDATIONS OF INTERNATIONAL ECONOMICS: POST KEYNESIAN PERSPECTIVES 200, 205–09 (Johan Deprez & John T. Harvey eds., 1999).

20. World Trade Organization, *The WTO in Brief: Part 1 (The Multilateral Trading System—Past, Present and Future)*, at http://www.wto.org/english/thewto_e/whatis_e/inbrief_e/inbr01_e.htm (last visited Mar. 27, 2001) (indicating that over the last fifty years merchandise exports grew by a six percent average annual rate, and that world trade is fourteen times larger in 1997 than in 1950).

21. Deprez & Deprez, *supra* note 17, at 69–70.

22. *See id.* at 70–72.

23. *See id.* at 72–73.

24. World Trade Organization, *The WTO in Brief: Part 3 (The WTO Agreements)*, at http://www.wto.org/english/thewto_e/whatis_e/inbrief_e/inbr03_e.htm (last visited Mar. 1, 2001) [hereinafter *WTO Part 3*] (stating that GATT became the WTO's umbrella agreement for trade in goods).

25. *Id.*

26. World Trade Organization, *Trading into the Future: The Introduction to the WTO*, at http://www.wto.org/english/thewto_e/whatis_e/tif_e/fact4_e.htm (last visited Apr. 9, 2001).

27. World Trade Organization, *The WTO*, at

GATT to include an agreement on services (GATS), rules for trade and investment in intellectual property (TRIPS), and dispute settlement.²⁸

B. The Phases of the Process of Globalization

The process of globalization is not as simple as lowering tariffs, eliminating non-tariff barriers, and letting the "free market" take over. The process also includes the creation of laws and institutions that allow for international integration; standardization of products, services, and measures; and mechanisms of dispute resolution.²⁹ From this it is possible to identify distinct phases in the globalization process. Usually, the initial step is the breaking down of traditional trade barriers followed by a second step involving deregulation and privatization of industries. The third phase is dominated by international coordination, harmonization, and standardization.

1. Phase I: Breaking down Traditional Trade Barriers

The traditional trade barriers are tariffs, quotas, and non-tariff barriers.³⁰ Non-tariff barriers typically include bureaucratic barriers, such as import licenses, product standards, and agency red tape.³¹ The first phase of globalization aims at the reduction and elimination of these types of barriers.

For example, GATT originally addressed only the reduction of tariffs and other trade barriers levied on the trade of goods.³² Similarly, the EU started with the European Coal and Steel Community Treaty signed in Paris in 1951.³³

2. Phase II: Deregulation and Privatization

The second phase of globalization involves the restructuring of the domestic economy. Globalization not only reduces the economic barriers between countries, but also alters the way in which a domestic

http://www.wto.org/english/thewto_e/thewto_e.htm (last visited Apr. 9, 2001).

28. *WTO Part 3*, *supra* note 24 (indicating that services—including those offered by telecommunications companies—are covered by the new General Agreement on Trade in Services (GATS), that intellectual property is covered by GATT agreements, and that the Dispute Settlement Understanding enforces the GATT rules).

29. See R.F.M. Lubbers, *The Globalization of Economy and Society*, GLOBUS (Dec. 1996), available at <http://globalize.kub.nl/publications.asp?code=18> (last modified Dec. 14, 1999).

30. See generally *id.*

31. See generally *id.*

32. *WTO Part 3*, *supra* note 24.

33. Europa, *The History of the European Union—1951*, at http://europa.eu.int/abc/history/1951/1951_en.htm (last visited Mar. 15, 2001).

economy operates. Deregulation and privatization are key aspects to this restructuring.

With the creation of the WTO, services were covered under the General Agreement on Trade in Services (GATS) and intellectual property under TRIPS to increase fair trade between countries.³⁴ Deregulation of telecommunications in South America is a recent example. In Argentina, for example, the liberalization of the telecommunications sector started on November 8, 2000.³⁵ The Argentinean deregulation was aimed at creating a more competitive market and attracting foreign investment.³⁶ In Venezuela, tax reforms aim to increase transparency and modernize the tax structure.³⁷ Privatization of telecommunications is also spreading to more and more countries.³⁸

3. Phase III: International Coordination, Harmonization, and Standardization

The third phase of globalization occurs when order and organization are imposed on international systems, because these come to be perceived as unnecessarily chaotic. The desire to impose order may come from dissatisfaction with the market outcomes that are generated by a highly deregulated, privatized, and uncoordinated international market system. Illustrations range from the financial crises in Mexico, to the loss of jobs resulting from companies shifting operations to low wage countries.³⁹

The desire to impose order may also come from a desire or need to address issues of international economic interrelationship that cannot be addressed by private markets. Pollution and the emergence of global warming is one such issue that is now resulting in coordinated, international attempts to understand and fix the problem.⁴⁰ The

34. *WTO Part 3*, *supra* note 24.

35. See Erica Eppinger, *Argentina Finally Overhauls Regulations? Espero que Si!*, CONVERGENT COMM. LATIN AMERICA, June 2000, at 2 (YANKEE GROUP REP.).

36. *Id.*

37. See Alberto Parra-Febres, *Venezuelan Reform: Transparency Policy, Transfer Pricing Methods*, 11 J. INT'L TAX'N 38, 38-40 (2000).

38. See Ernest R. Larkins, *Business Taxation in Latin America—Similarities, Trends, and Strategies*, 11 J. INT'L TAX'N 22, 22 (2000) (examining the pattern of tax reform in Latin America and its impact on foreign investment decisions of U.S. multinational companies).

39. See Ilene Grabel, *Emerging Stock Markets and Third World Development: The Post Keynesian Case for Pessimism*, in *Foundations of International Economics: Post Keynesian Perspectives* 229, 229-30 (Johan Deprez & John T. Harvey eds., 1999).

40. See INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC), SUMMARY FOR POLICYMAKERS: A REPORT OF WORKING GROUP I OF THE INTERGOVERNMENTAL PANEL ON

depletion of world fish stocks is another, similar problem.⁴¹ International organizations, national governments, non-governmental organizations, associations of business enterprises, and even transnational corporations themselves can organize these attempts at coordination.

III. THE DEVELOPMENT OF THE TELECOMMUNICATIONS INDUSTRY WITHIN THE CONTEXT OF GLOBALIZATION

Telecommunications is an industry that has experienced rapid quantitative and qualitative growth during the 1990s. By 2000, telecom market revenue more than doubled over the decade by increasing from \$508 billion in 1990 to \$1.16 trillion.⁴² The largest part of this increase occurred because of the mushrooming of mobile telephone use, which rose from eleven million subscribers in 1990 to 650 million subscribers in 2000; total revenue increased from \$11 billion in 1990 to \$230 billion in 2000.⁴³ Revenues from non-traditional sources, such as leased circuits, data communications, telex, telegraph, and other telecom-related activities increased from \$29 billion in 1990 to \$150 billion in 2000.⁴⁴ The number of personal computers jumped more than fourfold from 120 million computers in 1990 to 500 million computers in 2000.⁴⁵ Internet users ballooned from 2.6 million people in 1990 to 385 million people in 2000.⁴⁶

This rapid growth in the telecommunications sector plays an important role in the globalization process by improving the ability of countries to interact. While the new technological capabilities have developed largely outside of the globalization process, these new capabilities have stimulated the speed at which the internationalization of the telecommunications industry is occurring. In turn, national efforts to participate in globalization have further encouraged the spread of telecommunication technology. There are two examples of these

CLIMATE CHANGE 2 (2001), available at <http://www.usgcrp.gov/ipcc/wg1spm.pdf>.

41. See Jeffrey A. Hutchings, *Collapse and Recovery of Marine Fishes*, NATURE, Aug. 24, 2000, at 882-83 (indicating that over-exploitation and the subsequent collapse of marine fish stocks increases the probability of extinction).

42. INT'L TELECOMM. UNION (ITU), KEY INDICATORS FOR THE WORLD TELECOMMUNICATION SERVICE SECTOR, at http://www.itu.int/ti/industryoverview/at_glance/KeyTelecom99.htm (last modified Apr. 7, 2000) (giving estimates for calendar year 2000).

43. *Id.*

44. *Id.*

45. *Id.*

46. *Id.*

efforts. First, the removal of international trade barriers has been an important component in the spread of technology and the internationalization of telecommunications. Second, and probably more important to the globalization of the telecommunications industry, is the deregulation and privatization of national telecommunication companies. This has resulted in greater market access and competition, which has created an ongoing change in the number of telecommunication business entities and their internal structures, as new companies enter the national markets and others merge together. In addition, there are now increasing attempts at international coordination and standardization in the industry according to uniform rules.

A. Technological Capabilities

During much of the post-World War II period, telecommunications technology evolved in a relatively stable manner.⁴⁷ Because of the computer revolution and the rapid development of fiber-optic technology, the dynamics of the evolution of technology changed rapidly in the 1990s.⁴⁸ Now, the world finds itself in the Information Age where “the investment capital is knowledge and the means of production the human intellect.”⁴⁹ The development of digital technology has been instrumental in this new revolution.⁵⁰ This revolution is creating a “convergence of media (from print to television) with telecommunications (fixed or mobile) and computing (hardware and software).”⁵¹

This rapid technological progress is partially reflected in changes readily observable by the general public, while other changes tend to be covert. For example, worldwide mobile phone sales increased to 412.7 million units in 2000, a 45.5% jump over 1999 sales.⁵² Similarly,

47. See generally Webb & Associates, *Telecommunications History Timeline*, at <http://www.webbconsult.com/hist-time.html> (last visited Apr. 3, 2001) (providing a detailed timeline of technological and corporate developments in the telecommunications industry).

48. See generally Webb & Associates, *The 1990s (The Century Closes—Into the Next Millennium)*, at <http://www.webbconsult.com/1990.html> (last visited Mar. 22, 2001) (indicating the technological and structural changes in telecommunications during the 1990s).

49. INT’L TELECOMM. UNION (ITU), TRENDS IN TELECOMMUNICATION REFORM 1999: CONVERGENCE AND REGULATION (EXECUTIVE SUMMARY) 5 (Oct. 1999), at <http://www7.itu.int/treg/publications/Copy%20of%20SummaryE.pdf> (last visited Mar. 16, 2001) [hereinafter ITU, TRENDS].

50. *Id.*

51. *Id.*

52. *Mobile Phone Sales Jump in 2000, But Handset Manufacturers Still on Shaky Ground*, TELCOTIMES, Feb. 15, 2001, at http://www.telcotimes.com/archive/news/gartner_02152001.htm (last visited Feb. 15, 2001).

online consumer spending hit \$28 billion in 2000, compared to \$17.3 billion in 1999, and \$7.7 billion in 1998.⁵³ Likewise, in January 2001, U.S. Internet access hit 162 million people, about 60% of the U.S. population.⁵⁴

B. The Removal of Traditional Barriers to International Trade

Trade barriers are typically analyzed in terms of the trade of goods and are usually broken down into tariffs, quotas, and non-tariff barriers.⁵⁵ The trade barriers that exist with respect to the provision of telecommunications services do not fit neatly into these categories. Generally, the barriers to international trade in the telecommunications industry take the form of regulatory and licensing requirements. This is because a significant part of the telecommunications industry involves the provision of services, rather than the trade of goods.

The industry, however, is also involved in the trade of goods and does face traditional barriers. The trade of goods in telecommunications focuses on the sale of consumer durable goods, such as cell phones, and the component parts of the telecommunications infrastructure network. These goods encounter the traditional trade barriers: tariffs, quotas, and non-tariff barriers. Non-tariff barriers pose special problems for the industry. Among them is the reluctance of some countries—particularly the United States—to allow the export of high-tech goods or to allow such foreign goods to compete with their domestic equivalents.⁵⁶ In the end, many of the infrastructure goods enter new markets when foreign telecommunication companies set up operations in markets abroad.⁵⁷

C. Deregulation, Privatization, and Market Access

Within the telecommunications industry, deregulation has been fundamental to the globalization of the industry. This, in part, explains why telecommunication companies are late players in the overall globalization process.

53. Keith Regan, *U.S. Online Spending Up 62 Percent in 2000*, E-COMMERCE TIMES, Feb. 15, 2001, at <http://www.ecommercetimes.com/perl/story/7537.html> (last visited Feb. 15, 2001).

54. Tim McDonald, *Internet Penetration Sets New U.S. Record*, NEWSFACTOR NETWORK, Feb. 14, 2001, at <http://www.newsfactor.com/perl/story/7497.html> (last visited Mar. 27, 2001).

55. See *supra* Part II.B.1.

56. See Bureau of Exp. Admin., *Summary of the Export Enforcement Program*, at <http://www.bxa.doc.gov/Enforcement/eeprgrm.htm> (last visited Apr. 03, 2001) (describing the U.S. Department of Commerce's enforcement of laws controlling exports).

57. See *infra* Part V.

Historically, telecommunications markets were typically based on a government-owned monopoly of service supply. The breaking of this monopoly and allowing for competition is a key, ongoing component of the developing telecommunications market.⁵⁸ This market liberalization has two identifiable components. First, there is the creation of other domestic firms to compete with the incumbent entity. Second, there is the opening up of the domestic markets to foreign firms.

The degree of competition varies in different parts of the telecommunications industry. The basic services market remains highly noncompetitive, with 73% of the world's markets maintaining a monopoly.⁵⁹ At the other end of the spectrum are the Internet service providers, with 72% of the global market open to competition, and the global cellular market, where 67% of the market is open to competition.⁶⁰

Telecommunications competition is important in making a variety of services cheaper and more accessible, as well as being a driving force for technological development and upgrades. For example, the European Commission (EC) is pushing EU member countries to foster competition for local telephone lines as a way to reduce European Internet access costs to be comparable to those in the United States.⁶¹ Opening up access to phone lines is also viewed as stimulating technical innovation.⁶²

This liberalization is partially being pushed by obligations under the WTO. The WTO, in contrast to its GATT predecessor, has extended to include services via the WTO's GATS and related

58. See, e.g., *Taiwan Ends Fixed Line Monopoly*, TELCOTIMES, Jan. 30, 2001, at http://www.telcotimes.com/archive/news/taiwan_01302001.htm (pointing out that Chunghwa Telecom's monopoly in Taiwan's local call market is being broken by the entry of three newly licensed, privately-held consortiums: Eastern Broadband Telecom, Taiwan Fixed Network Telecom, and New Century Infocomm Co.); *Soon-to-be Former India Long Distance Monopoly Privatize*, TELCOTIMES, Feb. 8, 2001, at http://www.telcotimes.com/archive/news/india_02082001.htm (indicating that the Indian government plans to reduce its 53% share in Videsh Sanchar Nigam Limited (VSNL) by selling 25% to a partner and 1.97% to employees); *Korea Telecom Privatization Receives Little Interest*, TELCOTIMES, Feb. 6, 2001, at http://www.telcotimes.com/archive/news/kt_02062001.htm (indicating that the Korean government plans to reduce its 59% share in Korea Telecom (KT) in stages until all its shares are sold by June 2002).

59. See ITU, TRENDS, *supra* note 49, at 7.

60. *Id.*

61. Chet Dembeck, *One Year Ago: EU To Force Telco Competition*, E-COMMERCE TIMES, Feb. 15, 2001, at <http://www.ecommercetimes.com/perl/story/7415.html> (last visited Apr. 4, 2001).

62. *Id.*

agreements.⁶³ This creates an additional avenue of pressure for telecommunications deregulation.⁶⁴

D. Changes in Entities and Their Structures

Large national firms dominate the world telecommunications market. For example, the top public telecommunications operators, ranked in terms of 1999 revenue, are NTT of Japan at \$98 billion, AT&T of the United States at \$62.4 billion, SBC of the United States at \$49.5 billion, MCI Worldcom of the United States at \$37.1 billion, and Deutsche Telekom of Germany at \$35.8 billion.⁶⁵ The top eight telecom equipment manufacturers were each estimated to have more than \$20 billion in revenue in 2000; Canada's Nortel led the way with \$29.8 billion of revenue, followed by Sweden's Ericsson and Finland's Nokia.⁶⁶ The International Telecommunications Union (ITU) ranked the top three telecom equipment vendors: Lucent of the United States with revenue of \$26.8 billion, Ericsson with revenue of \$21.5 billion, and France's Alcatel with revenue of \$20.9 billion.⁶⁷ This data illustrates that while dominated by large firms, this industry, nevertheless, is a volatile one with potential for substantial growth.⁶⁸

The deregulation process, at some point, permits large foreign transnational firms entry into the local market, previously restricted only to domestic firms. The privatization process often results in the large foreign corporations purchasing the former state companies.⁶⁹ This entry by the large foreign firms creates a variety of positive effects,

63. See World Trade Organization, *The WTO in Brief: Part 3*, *supra* note 24.

64. See, e.g., *CompTel Warns U.S. Trade Officials of Anticompetitive Practices*, TELCOTIMES, Jan. 31, 2001, at http://www.telcotimes.com/archive/news/CompTel_01312001.htm (explaining how CompTel argues that Germany, Mexico, South Africa, Japan, and Taiwan are violating their WTO obligations by engaging in anti-competitive practices such as "failed interconnection, exorbitant national license, fees, and delayed delivery of vital services to competitors.").

65. See Int'l Telecomm. Union, *Top 20 Public Telecommunication Operators*, at http://www.itu.int/ti/industryoverview/at_glance/top20_1999.htm (last modified Feb. 14, 2001). Note that these 1999 figures are the most recent comparable numbers provided by the ITU.

66. See *Gartner Dataquest Updates Telecom Equipment Manufacturer Ranking for 2000*, GARTNER, Mar. 7, 2001, at http://www4.gartner.com/5_about/press_room/pr20010307b.html (last visited Apr. 03, 2001) [hereinafter *Gartner Dataquest*].

67. See Int'l Telecomm. Union, *Top 20 Telecom Equipment Vendors*, at http://www.itu.int/ti/industryoverview/at_glance/Top2098.htm (last modified Oct. 8, 1999).

68. See *Gartner Dataquest*, *supra* note 66.

69. See ITU, *TRENDS*, *supra* note 49, at 9 (indicating that "[t]o avoid losing market share or to increase it in new markets, companies have merged, acquired and formed alliances with other companies."). In Asia, fifty-five percent of operators have been privatized, while in Europe almost fifty percent were privatized by mid-1999. *Id.* at 8.

including access to their advanced technology and expertise, as well as to the global network that these companies possess.⁷⁰ Yet, despite these positive effects, there is often a fear that the foreign companies will dominate and control the local market and will, consequently, not act in the national interest of the country within which they do business.

A recent and important example of this is the negative reaction of some legislators in the U.S. Congress to Deutsche Telekom's acquisition of VoiceStream Wireless.⁷¹ Their attempt to draft legislation to block this merger drew a strong reaction from the EU.⁷² The EU warned that the U.S. legislation would send the wrong message to European countries that are opening their markets by deregulating rules, increasing competition, and allowing foreign ownership of companies operating in Europe.⁷³

In reaction to these types of problems, incumbent domestic companies are trying to position themselves so that they can effectively compete with the large transnational telecommunications companies. Companies, for example, would merge so that they could possess a larger market share and better compete with foreign companies.⁷⁴ For example, Indonesia's state-owned incumbent carrier, Indonesian Telkom, is trying to position itself for the opening up of the Indonesian domestic telecommunications market in 2003 by acquiring PT Indosat, the country's international telecommunications operator, which is 65% owned by the Indonesian government.⁷⁵

E. Coordination and Standardization

Communication requires, by definition, some degree of standardization. Just as people cannot communicate with each other unless they use a commonly understood language or other method of

70. See *id.* at 9 (indicating that telecommunications, cable, satellite and content/entertainment companies, and ISPs benefit from consolidation of markets).

71. Neil S. Ende & Alexandre B. Bouton, *US-EU Tensions Over International Mergers*, TELCOTIMES, Oct. 12, 2000, at http://www.telcotimes.com/archive/news/mergers_10122000.htm (last visited Apr. 4, 2001); *House Continues To Fight Foreign Ownership*, TELCOTIMES, Aug. 11, 2000, at http://www.telcotimes.com/archive/news/hollings_08112000.htm (last visited Apr. 4, 2001).

72. European Union in the US, *EU Objects to Draft US Legislation Aimed at Blocking Telecoms Mergers Between US and Foreign Companies*, EUROPE, July 27, 2000, at <http://www.eurunion.org/news/press/2000/2000042.htm>.

73. *Id.*

74. See, e.g., *Telkom Insists on Acquiring Indosat*, TELCOTIMES, Jan. 9, 2001, at http://www.telcotimes.com/archive/news/indosat_01092001.htm (last visited Apr. 4, 2001).

75. *Id.*

communication, an international telecommunications network must coordinate with the diverse national systems to form a technologically compatible standard.

Part of international coordination in the telecommunications industry comes through the ITU. The ITU started as the International Telegraph Convention in May 1865, morphed into the ITU, and became a specialized agency of the United Nations⁷⁶ on October 15, 1947.⁷⁷

The ITU drafts global standards for the telecommunications industry.⁷⁸ Fourteen Study Groups, which have created more than 2,600 recommendations or standards, carry out this standardization work.⁷⁹ For example, the ITU recently "approved new world standards for next generation optical networks that will provide ultra-high capacity using Dense Wavelength-Division Multiplexing (DWDM)."⁸⁰

Coordination is also stimulated by the convergence of the telecommunications, broadcasting, and information technology industries through uniform regulatory schemes that blur the traditional jurisdictional boundaries, which separated media, telecommunications, and computing.⁸¹ Since the early 1990s, more than 150 countries have modified or changed their regulations.⁸² Malaysia's 1998 law, for example, grouped telecommunications, broadcasting, and the computing industries into one industry with one regulator.⁸³ Other countries, like

76. The fact that the ITU is a U.N. organization is, at times, important for understanding the implications arising from its conventions and how these interrelate with other controlling agreements. For example, the ITU's Melbourne Convention does not apply to Taiwan because it is not a member of the U.N., but Taiwan is an "observer government" of the WTO. See World Trade Organization, *The Organization: Members and Observers*, at http://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm (last visited Mar. 16, 2001) (providing a complete listing of members and observers as of November 30, 2000 with effective dates of membership).

77. See Int'l Telecomm. Union, *ITU's History*, at <http://www.itu.int/aboutitu/history/history.html> (last modified Nov. 2, 1999).

78. The ITU is divided into three functional sectors: Radiocommunication (ITU-R), Telecommunication Standardization (ITU-T), and Telecommunication Development (ITU-D). See Int'l Telecomm. Union, *Structure*, at <http://www.itu.int/aboutitu/structure/> (last visited Feb. 8, 2001).

79. Int'l Telecomm. Union, *The ITU Telecommunication Standardization Sector (ITU-T)*, at <http://www.itu.int/ITU-T/> (last updated Mar. 27, 2001).

80. *ITU Approves New World Standards for Next Generation Optical Network*, TELCOTIMES, Feb. 14, 2001, at http://www.telcetimes.com/archive/news/ITU_02142001.htm (last visited Feb. 15, 2001).

81. ITU, TRENDS, *supra* note 49, at 5.

82. *Id.*

83. *Id.* at 5-6.

China and Namibia, place responsibility for these converging industries under one ministry, and may eventually create a single regulator.⁸⁴

IV. TAX COMPETITION AND GLOBALIZATION

Globalization is responsible for significantly extending the scale and scope of international tax competition. By greatly expanding the ease by which goods, services, and capital cross national borders, tax differences between jurisdictions are increasingly important in determining where business activities are conducted. A number of governments have been successful in using tax incentives to attract foreign investment. Yet many experts now view tax competition as harmful to the fiscal and developmental goals of many countries. As a result, there is an increasing movement away from tax competition toward tax harmonization and coordination.

A. International Tax Competition and Its Interrelationship with Globalization

Tax competition is the use of taxation by authorities to attract business activities to their jurisdictions.⁸⁵ Governments can compete for investment by slashing tax rates, providing tax exemptions, and passing rules benefiting business. These can be used to affect finance and real capital, labor, or services—any of which are obviously important to business.

As explained below, because capital and business operations are now better able to move across borders, globalization has increased the use and effectiveness of tax competition. With the reduction of barriers to trade, firms are not limited to particular locations to carry out their activities.⁸⁶ For example, having a production facility in the jurisdiction where sales occur is no longer a business requirement.⁸⁷ Hence, location-specific factors, such as tax rates, can affect the expected profitability of an activity and the firm's decision on where the

84. *Id.* at 7.

85. See "Challenges Facing Tax Policy in the Coming Years": Treasury Acting Assistant Secretary for Tax Policy Center, Jonathan Talisman Remarks to the AICPA National Conference on Federal Taxes Washington, DC (Nov. 7, 2000) (transcript available at <http://www.ustreas.gov/press/releases/ps1002.htm>). Mr. Talisman points out that "[i]nternational tax competition occurs when one country provides a tax inducement to attract capital from another country." *Id.*

86. Avi-Yonah, *supra* note 1, at 1589–90.

87. See *id.* at 1590–91 (indicating that conglomerates spread their operations to different countries).

activity should be located.⁸⁸ With globalization, it is not only the effectiveness of tax incentives that drives tax policy, but also the large increase in international trade. Globalization creates more private business activities for which tax authorities can compete.

The increase in international tax competition has resulted in changing economic and tax policies for many countries, including the United States.⁸⁹ Theoretical arguments, as well as empirical and anecdotal evidence, point to the overall positive benefits of tax competition on corporations, tax authorities, and economies.⁹⁰ On the other hand, significant theoretical and empirical authority indicates that tax competition has negative outcomes for economies and tax authorities.⁹¹ The increasing concern about the negative outcomes is resulting in stronger attempts at tax harmonization and coordination.

B. The Positive Goals and Results of Tax Competition

Tax competition has been successfully used by a number of countries to attract foreign investment,⁹² which appears in the form of both real and financial investment.⁹³ Real investments, such as manufacturing plants and warehouses, are important for economic development because of their importance in directly and indirectly generating employment for local residents, raising income, and increasing local consumption.⁹⁴ The financial investment may be important in developing the banking and financial sector of an economy and may directly and indirectly generate additional real investment.

Theories abound on the nature and effects of tax competition.⁹⁵ The use of tax incentives by governments is aimed at increasing economic activity—especially employment—and thereby increasing tax

88. *Id.* at 1590-91.

89. Hines, *supra* note 3, at 305.

90. Avi-Yonah, *supra* note 1, at 1591.

91. *Id.* at 1592.

92. Ireland is the most commonly cited success story. *See infra* Part V.B.

93. *See infra* Part VI.

94. In economics, it is broadly accepted that increases in real investment directly benefit local employment, income, and propensity to consume, which then sets off additional benefits (mathematically represented by a multiplier). *See* JOHN MAYNARD KEYNES, *THE GENERAL THEORY OF EMPLOYMENT, INTEREST, AND MONEY* 115-28 (1st Harbinger ed. 1964) (1936). Increases in real investment may also stimulate additional real investment (accelerator), which, in turn, creates additional employment, expenditures, sales, and income. *See* R.F. HARROD, *THE TRADE CYCLE: AN ESSAY* (Augustus M. Kelley 1961) (1936).

95. *See* John Douglas Wilson, *Theories of Tax Competition*, 52 NAT'L TAX J. 269, 269 (1999) (providing a broad survey of the theoretical models in the tax competition literature).

revenues.⁹⁶ A lower tax rate can increase tax revenues only if the tax base, the taxable income and property, increases by a large enough amount. This requires that business investment expenditures respond elastically to tax changes.

Empirical studies generally agree that foreign direct investment (FDI) reacts positively to lower tax rates.⁹⁷ A tax elasticity of investment of roughly -0.6 seems to be a common reference point when it comes to U.S. FDI.⁹⁸ There seems to be a much more significant impact of lower tax rates on FDI financed by internal funds of the local foreign-owned subsidiary than on FDI financed directly by the foreign parent company.⁹⁹ When examining expenditures on U.S.-owned property, plant, and equipment (PPE), there seems to be even more positive impact from tax competition.¹⁰⁰ In fact, the data seems to indicate that, as globalization has progressed, PPE has become more sensitive to tax reductions.¹⁰¹

Other positive effects are also recognized in the literature. It is argued, for example, that tax competition improves government efficiency, reduces government waste, and improves social welfare.¹⁰² Tax competition may encourage welfare efficiency despite imperfect competition that can bring tax rates to zero or "commitment problems" in which companies commit to keeping operations only for as long as the initial tax subsidies remain.¹⁰³ Tax competition encourages government efficiency either by reducing the excessive size of

96. See, e.g., Internal Revenue Authority of Singapore, *An Overview of the Singapore Tax System*, at <http://www.iras.gov.sg/TaxInfo/Overview/overview.htm> (last modified Mar. 07, 2001) [hereinafter IRAS, *An Overview*] (indicating that the Singapore's tax policy is aimed at promoting economic and social goals by attracting foreign investment and encouraging residents to work hard).

97. See Hines, *supra* note 3, at 308–13 (surveying and discussing the empirical studies on FDI).

98. *Id.* at 312. This tax elasticity of investment means that a 1% decline in the tax rate creates an increase in FDI of 0.6%.

99. *Id.* at 309 n.14 (pointing out that a number of studies indicate significantly lower and "inelastic" tax elasticities of investment (0.5 and close to zero) for investment financed by parent funds compared to higher and more "elastic" tax elasticities of investment (1.4 and 1.89) for investment financed by internal funds). In this context, an "inelastic" tax elasticity means that the percentage change in FDI is less than the percentage change in the tax rate (thus the tax elasticity will be less than one). *Id.* An "elastic" tax elasticity means that the percentage change in FDI is larger than the percentage change in the tax rate (thus the tax elasticity will be greater than one). *Id.*

100. See *id.* at 310–11.

101. See *id.* at 311 (citing a study indicating that the tax elasticity of PPE investment increased (in absolute value) from -1.5 in 1984 to -2.8 in 1992).

102. Wilson, *supra* note 95, at 296–98.

103. *Id.* at 294–96.

government or increasing public welfare through "expenditure competition," in which governments exercise their spending power to attract more workers and increase the tax rate.¹⁰⁴

Both large-scale empirical analyses and case studies indicate that tax competition tends to have a positive impact on attracting foreign investment.¹⁰⁵ The manner in which foreign investment is attracted and the magnitude of the effect is open to debate.¹⁰⁶ Some experts are skeptical of the positive empirical results and point to other studies that raise questions about resulting government inefficiency and heavier tax burdens on labor.¹⁰⁷

C. Harmful Tax Competition

There are now credible arguments pointing to the benefits of tax competition¹⁰⁸ especially for transnational corporations, and increasingly so with the spread of globalization. Nevertheless, the literature against tax competition asserts that it can lead to inefficiently low taxes and government spending on public goods.¹⁰⁹ This fear has been confirmed.¹¹⁰ Governments are increasingly worried that "their tax bases are eroded through the actions of countries [that] offer taxpayers ways to exploit tax havens and preferential regimes to reduce the tax that would otherwise be payable to them."¹¹¹ In other words, tax competition is seen as harmful to the economy when it draws business and capital away from a significant number of jurisdictions and reduces the tax revenue that would otherwise be generated.

Tax literature repeatedly indicates that competition leads to a "race to the bottom" and that government, corporations, and experts recognize the race.¹¹² "Race to the bottom" occurs when countries compete for

104. See *id.* at 296-97.

105. Hines, *supra* note 3, at 308-12.

106. See Avi-Yonah, *supra* note 1, at 1643-48 (discussing problems in recent empirical studies about the benefits of tax competition and arguing that developing countries would be better off ending tax competition).

107. See *id.* at 1611-25.

108. Wilson, *supra* note 95, at 298.

109. *Id.*

110. *Id.*

111. ORG. FOR ECON. CO-OPERATION & DEV. (OECD), HARMFUL TAX COMPETITION: AN EMERGING GLOBAL ISSUE 37 (1998) [hereinafter OECD, COMPETITION].

112. See, e.g., Priscilla Demenge-Beauchesne, *France Aims to Win the Tax Rates Race*, INT'L TAX REV. (Nov. 2000), at <http://www.legalmediagroup.com/internationaltaxreview/includes/print.asp?SID=823> (arguing that France's draft finance bill for 2001 follows the example of Germany in reducing effective corporate tax rates).

mobile investment and capital by offering tax incentives and subsidies.¹¹³ The race may result with an inefficiently lax tax regime and set of public policies.¹¹⁴ Both national and local governments participate in this race by providing their own tax incentives.¹¹⁵

One example of the “race to the bottom” deals with the withholding tax on portfolio interest income earned by foreign residents from investment sources within the United States.¹¹⁶ In 1984, the United States unilaterally abolished its 30% withholding tax by providing an exemption for such income.¹¹⁷ Motivated by a fear that mobile finance capital would be lost to the United States, other countries followed the United States and provided their own portfolio interest income tax exemption.¹¹⁸ Some experts argue that whatever economic justifications may have existed at the time the exemption was created are now gone and it is time to reverse the trend.¹¹⁹

Scholars identified several negative effects of tax competition. One major effect is its contribution to the fiscal crisis of the welfare state.¹²⁰ The lower tax rates, and other tax incentives generated by tax competition, result in lower tax revenues and prevent the state from having sufficient funds for social welfare programs.¹²¹ In addition, by providing tax breaks to corporations and the wealthy, some see globalization and tax competition as a significant contributor to making tax structures more regressive and, therefore, widening the gaps in the distribution of income and wealth.¹²²

Tax competition is also believed to violate the “capital export neutrality” principle.¹²³ The “capital export neutrality” principle holds that companies should locate their firms where return on investment is maximized, and that tax rates should be immaterial to the profit

113. See Avi-Yonah, *supra* note 1, at 1581.

114. Wilson, *supra* note 95, at 288–89.

115. See, e.g., *Hawaii Increases Hi-Tech Tax Incentives*, at <http://www.internationaltaxreview.com/DisplayITRStory.asp?StoryID=788> (last visited Mar. 19, 2001) (indicating that the state of Hawaii provides tax incentives for high-tech companies to settle on the island).

116. Avi-Yonah, *supra* note 1, at 1581.

117. *Id.* at 1579.

118. *Id.* at 1579–81.

119. *Id.* at 1667–68.

120. *Id.* at 1632–39.

121. *Id.* at 1632–33.

122. Livingston, *supra* note 5, at 742–44.

123. Karen B. Brown, *Harmful Tax Competition: The OECD View*, 32 GEO. WASH. J. INT’L L. & ECON. 311, 311–12 (1999) (book review).

maximizing decisions of firms.¹²⁴ This, the principle contends, would maximize world welfare.¹²⁵ Tax competition violates this principle because it encourages companies to locate where they can avoid paying taxes rather than where they would promote "worldwide efficiency and growth."¹²⁶

The OECD entered the discussion with its recent report, "Harmful Tax Competition: An Emerging Global Issue."¹²⁷ The OECD defines a harmful tax practice as one "that meets one of the three operative criteria of [(1)] no effective exchange of information, [(2)] lack of transparency, [or (3)] 'no substantial activities'/ring fencing" and that also offers a low/no/nominal rate of tax.¹²⁸ Low or no taxes indicate the existence of tax competition, but do not create a presumption that the tax practice is harmful.¹²⁹

Commentators have quickly responded to the report.¹³⁰ Some argue that regulating tax competition impinges on the sovereign's right of taxation.¹³¹ The large and powerful economies that dominate the OECD are criticized for imposing their view of what a tax regime should be on the small and relatively powerless economies that are typically labeled as tax havens.¹³² The OECD, therefore, is denying the small economies the ability to set their own, independent tax regime.¹³³

Low tax jurisdictions defend their use of tax competition by contending that they "simply offer a superior services-to-cost ratio" compared to developed countries.¹³⁴ In other words, the tax havens

124. *Id.* at 311.

125. *Id.*

126. *Id.*

127. OECD, COMPETITION, *supra* note 111, at 37.

128. ORG. FOR ECON. CO-OPERATION & DEV. (OECD), BRIEFING PAPER: OECD PROJECT ON HARMFUL TAX PRACTICES 2 (Oct. 17, 2000), *available at* <http://www.oecd.org/media/release/hrmfltaxbriefingpaper.pdf> [hereinafter OECD, BRIEFING PAPER].

129. *Id.*

130. *See, e.g.*, George M. Melo, Comment, *Taxation in the Global Arena: Preventing the Erosion of National Tax Bases or Impinging on Territorial Sovereignty?*, 12 PACE INT'L L. REV. 183 (2000); Brown, *supra* note 123; David E. Spencer, *OECD Report Cracks Down on Harmful Tax Competition*, 9 J. INT'L TAX'N 26 (1998).

131. *See* Melo, *supra* note 130, at 186-89.

132. *See* Brown, *supra* note 123, at 315-19 (noting that the OECD's definition of harmful tax competition excludes practices followed by developed countries, such as the United States and Ireland, and criticizing the OECD for "making generalized determinations about the harm caused by decisions of [developing countries]").

133. *Id.* at 315.

134. Melo, *supra* note 130, at 209.

view themselves as financial centers that effectively manage the monetary assets and flows of transnational corporations (TNCs) and individuals. By limiting the nature of tax competition, these services could not be provided as efficiently and the overall cost of operating TNCs would increase.

D. Tax Harmonization and Coordination

In this era of globalization, it may be surprising to note that OECD tax levels have been increasing. Taxes were 29% of aggregate OECD GDP in 1970, 33% in 1980, 36% in 1990, and 37.2% in 1998.¹³⁵ There is, however, a large variance of tax levels between member countries.¹³⁶ Sweden, Denmark, Finland, Belgium, France, and Luxembourg are at the high end of the spectrum, with taxes being over 45% of GDP.¹³⁷ At the lower end of the spectrum are Korea, Japan, Australia, the United States, and Turkey with taxes amounting to 20% to 30% of GDP, and Mexico with taxes at 16% of GDP.¹³⁸

The tax revenue sources have changed since the 1960s.¹³⁹ The largest, although declining, share of tax revenue comes from personal income taxes.¹⁴⁰ While the corporate income tax share of GDP has remained almost constant, the effective tax burden on business profits has declined.¹⁴¹ In contrast, value-added taxes (VAT) and other general consumption taxes have risen significantly to make up 18% of total tax revenue, compared to 12% in the 1960s.¹⁴²

With this backdrop, it is easier to understand the OECD's push for tax harmonization. Arguably, the OECD is trying to: (1) harmonize the wide discrepancy of tax rates that exist within member countries; (2) protect its overall tax rates against those outsiders that are undermining it with tax competition; and (3) alter the trend toward regressive taxes that is pushed by tax competition.

135. ORG. FOR ECON. CO-OPERATION & DEV. (OECD), *A World of Taxes*, at <http://www.oecd.org/daf/fa/stats/stats.htm> (last visited Apr. 12, 2001).

136. *Id.*

137. *Id.*

138. *Id.*

139. *Id.*

140. *Id.*

141. *Id.* (arguing that "[f]or over two decades the share of the corporate income tax has remained some 8[%] of total taxes. As the share of corporate profits in GDP of the OECD area strongly increased after the mid 1980s, effective tax burdens on profits fell. This trend reflects in part an increased erosion of the tax base as a consequence of widespread tax planning (including the use of 'tax havens') and intense tax competition among industrializ[ed] countries.").

142. *Id.* Additionally, social security taxes are the other area of significant increase. *See id.*

Ultimately, the OECD is pushing for cooperation and harmonization¹⁴³ as the means to address harmful tax competition.¹⁴⁴ The OECD identified forty-seven preferential tax regimes in certain OECD member countries that are potentially harmful and that it aims to eliminate.¹⁴⁵

The OECD's push against harmful tax practices is resulting in a dialogue with the alleged offending tax jurisdictions. In June 2000, the OECD identified thirty-five jurisdictions that met the technical criteria for being tax havens.¹⁴⁶ This has developed into an initiative for a dialogue with the listed jurisdictions based upon an OECD framework.¹⁴⁷ The framework presents terms and a timetable by which to eliminate harmful tax practices by December 31, 2005.¹⁴⁸ This led to regional conferences on harmful tax competition launched by the OECD, and involves the listed tax jurisdictions and other interested parties, such as the IMF, the World Bank, the U.N., and the WTO.¹⁴⁹

As with many aspects of internationalization and economic integration, Europe has led the way. Currently a tax harmonization process has gained momentum within the EU.¹⁵⁰ If there is one integrated market with one currency, then it is a logical extension to have a relatively harmonized tax system.¹⁵¹ The dynamic and

143. The OECD claims it is only looking toward tax cooperation and not tax harmonization. Jeffrey Owens, *Promoting Fair Tax Competition*, at http://www.oecd.org/daf/fa/harm_tax/PromotingFairTaxComp.pdf (last visited Apr. 12, 2001). Owens also claims that the OECD is not challenging legal tax planning. *Id.*

144. See ORG. FOR ECON. CO-OPERATION & DEV. (OECD), *TOWARDS GLOBAL TAX CO-OPERATION: PROGRESS IN IDENTIFYING AND ELIMINATING HARMFUL TAX PRACTICES* 9 (2000) (indicating that harmful preferential features of tax regimes in member countries must be removed by a set date).

145. *Id.* at 10, 12–14.

146. *Id.* at 17. The thirty-five jurisdictions include: British dependencies and territories, such as Jersey and the British Virgin Islands; territories of other countries, such as the U.S. Virgin Islands, Aruba (Netherlands), and Niue (New Zealand); small Caribbean countries, such as Barbados, Grenada, and St. Lucia; as well as other geographically-diverse jurisdictions, such as Monaco, Liechtenstein, Bahrain, Liberia, and the Seychelles. *Id.*

147. *Id.* at 24.

148. Org. for Econ. Co-operation & Dev. (OECD), *Framework for a Collective Memorandum of Understanding on Eliminating Harmful Tax Practices* 2–5 (2000), available at <http://www.oecd.org/media/MOUrev20novR1.pdf>.

149. Org. for Econ. Co-operation & Dev. (OECD), *Harmful Tax Practices*, Nov. 24, 2000, at http://www.oecd.org/daf/fa/harm_tax/harntax.htm (last modified Mar. 1, 2001) (pointing to discussions in Barbados on January 8 and 9, 2001, and a meeting in Tokyo on February 15–16, 2001).

150. Tracy A. Kaye, *European Tax Harmonization and the Implications for U.S. Tax Policy*, 19 B.C. INT'L & COMP. L. REV. 109, 110 (1996) (discussing European tax harmonization).

151. *Id.* at 111.

continually changing interrelationship between trade globalization and international tax issues is creating increasing pressure for international tax harmonization.¹⁵²

The key pressure arises from the need to have an international tax system that is a logical complement to the increasingly open and harmonized international trade system. GATT and the WTO have driven the increased harmonization in the international trade of goods, services, and financial assets.¹⁵³ Tax harmonization has to keep pace in order for taxes not to become the dominant barrier and distortion to international trade flows. Divergent tax policies, rates, and structures would hamper the globalization of trade by maintaining high international transaction costs and perverse price incentives.

There are fierce debates on how to achieve international tax harmonization in support of the WTO. A major example for the United States is the declaration by the WTO that the Foreign Sales Corporation (FSC) tax system provides for an illegal subsidy under WTO regulations.¹⁵⁴ The replacement legislation that was signed into law by President Clinton on November 15, 2000, is under attack by the EU as continuing illegal subsidies to U.S. firms.¹⁵⁵

V. THE APPLICATION OF TAX COMPETITION TO THE TELECOMMUNICATIONS INDUSTRY

International tax competition has continued to significantly impact the dynamics of the telecommunications industry under globalization. This impact can be best understood by looking at case studies. Ireland, for example, has most effectively used tax incentives to attract telecommunication investments.¹⁵⁶ In addition to the "Irish model," Singapore is examined as another important jurisdiction for understanding the dynamics of tax competition and the international telecommunications industry.¹⁵⁷

152. See Robert A. Green, *Antilegalistic Approaches to Resolving Disputes Between Governments: A Comparison of the International Tax and Trade Regimes*, 23 YALE J. INT'L L. 79, 87–104 (1998).

153. *Id.* at 91.

154. WORLD TRADE ORG. (WTO), UNITED STATES—TAX TREATMENT FOR "FOREIGN SALES CORPORATIONS," WT/DS108/AB/R (AB-1999-9) at ¶ 180, available at http://docsonline.wto.org/GEN_viewerwindow.asp?D:/DDFDOCUMENTS/T/WT/DS/108ABR.DOC.HTM (Feb. 24, 2000).

155. Barbara M. Angus & Kenneth J. Kies, *The United States Responds to the WTO FSC Decision: Round One and Counting*, 52 TAX EXECUTIVE 436, 437, 443 (2000).

156. See *infra* Part V.B.

157. See *infra* Part V.C.

A. The General Impact of Tax Competition on Telecommunications

As discussed below, there are five ways in which tax competition has influenced telecommunications development. First is the basic nature of the tax regime and tax rates that it applies. Second is the jurisdiction that the tax authority exercises over business activities and income. Third is the network of tax treaties that the tax jurisdiction has entered into. Fourth is the way in which the tax authority characterizes business activities. Fifth are the economic development tax waivers that may be granted by the tax authority or a related economic development agency.

1. Different Tax Regimes and Tax Rates

The most fundamental tax considerations that affect investment decisions are what types of income are taxed and at what rates they are taxed.¹⁵⁸ Differences in these considerations between tax jurisdictions are important to companies' decisions for the location of their investments.¹⁵⁹

Many of the location and other related issues also show up as transfer pricing considerations. Transfer pricing rules set the parameters for the international allocation of income generated by related companies located in more than one international jurisdiction. The OECD's guidelines typically set the international standard and basis for the law adopted by many countries.¹⁶⁰

2. Jurisdiction

Telecommunications raises a number of interesting jurisdictional issues. Many of these issues arise from the multinational nature of the provision of many telecommunications services. One context where these issues arise is in the international fiber-optic cable networks.

The laying of subsea fiber-optic cable involves a highly sophisticated geological survey of the seabed to find the most effective and efficient routes. These engineering considerations effectively dictate where the cables will be, generally swamping any tax

158. See, e.g., Avi-Yonah, *supra* note 1, at 1576 (noting that developing countries abolished withholding taxes on interest income paid by companies to foreign investors, while developing countries use tax havens to attract investments).

159. *Id.* at 1591.

160. See ORG. FOR ECON. CO-OPERATION & DEV., TRANSFER PRICING GUIDELINES FOR MULTINATIONAL ENTERPRISES AND TAX ADMINISTRATIONS (1999).

concerns.¹⁶¹ Where the cables are placed, however, may have significant tax implications. To avoid coastal shipping lanes and other ocean activity, most cable tends to lie outside the usual twelve-mile territorial waters limit. Individual U.S. states generally exercise a three-mile tax jurisdiction limit, the U.S. federal government and most countries a twelve-mile jurisdiction limit, while a few countries exercise a 200-mile tax jurisdiction limit.¹⁶²

Differences between tax jurisdictions provide a fascinating illustration of an issue that may have important implications for the telecommunications industry by potentially dictating where businesses will be located and, possibly by analogy, how similar taxes may be applied to certain telecommunications services. The issue is the imposition of sales and VAT to transactions made via the Internet. There is currently a major debate between the United States and the EU on taxing Internet sales.¹⁶³

3. Tax Treaties

A jurisdiction's network of tax treaties is a critical component of the tax package that an international investor is looking for when deciding where to place an investment. Bilateral tax treaties allow funds to be transferred between the two contracting states at lower rates than would normally exist in the absence of a treaty. A jurisdiction that permits an easy and cheap flow of money in and out of its territory may be very attractive to the international investor. Because what matters to the investor are the flows related to the other jurisdictions it does business with, the treaty tax rates—when they exist—will override the non-treaty rates.

Consequently, certain jurisdictions have been very aggressive in developing treaty networks in the last few years. Ireland, for example,

161. See Howie Doyle, *The Information Superhighway Provides an On-Ramp for the Underwater Industry*, UNDERWATER MAG., Summer 1997, available at <http://www.diveweb.com/offshore/features/uw-su97.02.htm> (last visited Mar. 22, 2001) (discussing the history of undersea communication cables and the range of modern technical concerns that dominate the determination of where and how to lay subsea fiber-optic cable).

162. See Frederick W. Quattlebaum & David Edquist, *Ventures on the High Seas U.S. Federal Tax Treatment of a Sale of IRU Capacity*, 1192 PRAC. L. INST./CORP. 583, 600–01 (2000) (pointing out that while the twelve-mile limit is the usual cable industry standard, three-mile and 200-mile limits may also apply under certain circumstances).

163. See David Hardesty, *EU Withdraws Proposals for VAT on Digital Sales*, E-COMMERCE TAX.COM, Feb. 4, 2001, at <http://www.ecommercetax.com/doc/020401.htm> (last visited Apr. 4, 2001) (indicating that the EU's proposal to have non-EU online sellers collect value added tax (VAT) on sales into the EU was challenged by the United States and others, and has resulted in the EU rethinking its approach).

"has comprehensive double taxation agreements in force with [thirty-nine] countries"—many of which were concluded in the last few years—and continues to add additional treaties.¹⁶⁴ Similarly, Mauritius has twenty-six bilateral tax treaties in effect and another fourteen treaties in various stages of completion.¹⁶⁵ Singapore, another tax friendly jurisdiction, has a growing network of forty tax treaties.¹⁶⁶ Importantly, of these three jurisdictions, the United States has only a treaty with Ireland and none with Mauritius or Singapore.¹⁶⁷

4. Characterization of Activities

Modern telecommunications raises a number of interesting characterization issues. International telecommunications involves the communication between people or entities in at least two countries.¹⁶⁸ The provision of this communication may also involve facilities and people located in other tax jurisdictions. This can include anything from transmission lines and cables to operational headquarters. In addition, it may be difficult, if not impossible, in certain circumstances to separate out and identify one communication from another in a global system. Under these circumstances it is very problematic to allocate income to the appropriate location.

Currently, an excellent example of this problem is found in the Internal Revenue Service's Proposed Regulation § 1.863-9 concerning the source rules applicable to communications income.¹⁶⁹ This Regulation illustrates the complexity of allocating international telecommunication income to foreign and domestic sources.¹⁷⁰ It also points to the difficulty in identifying individual communications.

164. The Irish Revenue, *Double Taxation Relief*, at http://www.revenue.ie/services/tax_info/taxes11.htm (last visited Jan. 18, 2001).

165. Mauritius Offshore Bus. Activities Auth., *Tax Treaty Jurisdictions*, at <http://213.133.197.50/ftp/mobaa/bodyframes/bodyfiles/taxtreatyjurisdictions.html> (last visited Feb. 2, 2001).

166. Inland Revenue Auth. of Singapore, *Countries with Tax Treaties*, at <http://www.iras.gov.sg/taxinfo/treaties.htm> (last modified May 22, 2000).

167. Internal Revenue Service (IRS), *Income Tax Treaties*, at http://www.irs.ustreas.gov/prod/ind_info/treaties.html (last visited Apr. 3, 2001).

168. We have moved well beyond the traditional international telephone call that involves a party in one country and a party in another. Conference calls can involve people in several countries. The same can be said when e-mails are sent to multiple addresses, when a corporate intranet exists for a transnational corporation active in a variety of countries, or when other information is provided over the Internet.

169. Prop. Treas. Reg. § 1.863-9, 66 Fed. Reg. 3907 (Jan. 17, 2001).

170. *Id.* (allocating international communications income between foreign and U.S. sources depending, among other factors, on whether the taxable entity is foreign or domestic).

Problematic rules along these lines may create a disincentive for efficient organization and location of telecommunication functions because they are likely to result in double taxation.

A significant part of international telecommunications travels, in whole or in part, through subsea cable systems.¹⁷¹ In laying and servicing this subsea cable, there is a question of how such activities should be characterized.¹⁷² Many income tax treaties explicitly account for shipping income or income derived from exploiting the seabed as categories that deserve special tax treatment.¹⁷³ Depending upon their specific formulation, some subsea telecommunication activity may fall under an exemption generated by these categories, may be explicitly accounted for, or fall outside these categories. Characterizing the source of income differently results, of course, in different tax consequences.¹⁷⁴

5. Economic Development Tax Waivers

In the modern information age, a well-developed telecommunications infrastructure is vitally important to ensuring an economy's effective participation in the global economy. While a variety of government expenditures and other domestic programs are used, tax waivers and benefits specifically targeted at certain types of firms or activities provide effective tools to stimulate the development of a state-of-the-art telecommunications infrastructure.¹⁷⁵

These types of economic development tax waivers and incentives are often used to encourage employment generated by a company's investment. For example, the Industrial Development Commission (IDC) of the U.S. Virgin Islands is authorized to extend tax benefits for "the promotion of growth, development and diversification of the

171. For many companies that have global cable systems, there are large amounts of both subsea and terrestrial cables. See, e.g., GLOBAL CROSSING, THE CAPACITY TO CHANGE THE WORLD, available at http://www.globalcrossing.com/pdf/network_english/pdf (last visited Mar. 29, 2001); 360NETWORKS, GLOBAL NETWORK, available at http://www.360.net/PDF/News-Fact-Sheets/360networks_Fact_Sheet_1.pdf (last visited Mar. 29, 2001).

172. Prop. Treas. Reg. § 1.863-9(b)(2)(i).

173. See, e.g., Income Tax Convention, Dec. 31, 1975, U.S.-U.K., art. 27(1) (entered into force Apr. 25, 1980), available at <http://ftp.fedworld.gov/pub/irs-trty/uk.pdf> (last visited Mar. 19, 2001).

174. Prop. Treas. Reg. § 1.863-9 (explaining that a taxpayer would be required to report taxable income based on the characterization of telecommunication income).

175. These tax waivers and benefits can be characterized as "tax expenditures" and can be directly compared with direct government expenditures to achieve the same goals. STANLEY S. SURREY & PAUL R. MCDANIEL, TAX EXPENDITURES 99-117 (1985).

Virgin Islands.”¹⁷⁶ These tax benefits include a 90% exemption on local income taxes, a 1% customs duty rate, and 100% exemptions on property taxes, gross receipt taxes and excise taxes on materials used in physical plants, as well as reductions in dividend withholding taxes.¹⁷⁷ These tax incentives are available only for investments in the U.S. Virgin Islands that employ at least ten Virgin Islands residents full-time and invest at least \$50,000 in the business, exclusive of inventory costs.¹⁷⁸ Companies that enjoy these incentives will likely exceed the minimum \$50,000 non-inventory investment requirement because firms with ten employees will generally require a larger amount of investment.

B. The “Irish Model”

One of the most successful jurisdictions in attracting high technology and telecommunications investment is Ireland.¹⁷⁹ The key components of the policy leading to Irish success include a lowering of taxes, developing a modern communications network, and having an inexpensive, but educated work force.¹⁸⁰ Stable legislation concerning large international investments is cited as an additional factor.¹⁸¹

1. The New Tax Regime in Ireland

The tax regime that is a key component of Ireland’s success is, of course, more sophisticated than just “lower taxes.” The tax structure, tax incentives, and the treaty system are the key tax factors. Being a multifaceted gateway to the EU is another key component of Ireland’s success.

Other countries are now explicitly trying to emulate the “Irish model.” Bulgaria is one such economy.¹⁸² The Bulgarian

176. Indus. Dev. Comm’n (IDC), *United States Virgin Islands: General Information*, at http://www.usvi.org/idc/general_info/index.html (last visited Mar. 27, 2001).

177. Indus. Dev. Comm’n (IDC), *United States Virgin Islands: IDC Tax Incentives and Qualifications*, at http://www.usvi.org/idc/general_info/taxbenefits.html (last visited Mar. 27, 2001).

178. *Id.*

179. Jessica J. Poyner, Comment, *Investing in Ireland: The Enticement of U.S. High-Tech Industry to the Emerald Isle*, 10 TRANSNAT’L LAW. 195, 197–98, 216 (1997); Meredith J. Coleman, Comment, *The Republic of Ireland’s Economic Boom: Can the Emerald Isle Sustain Its Exponential Growth?*, 21 U. PA. J. INT’L ECON. L. 833, 851–55 (2000).

180. John Hamilton, *Irish Recipe Is Touted As Nourishment for Bulgaria*, WALL ST. J. EUR., Oct. 6–7, 2000, Technology Journal, at 24.

181. See *id.* (noting that other countries attempting to emulate Ireland need stable legislation for large international investments).

182. *Id.*

telecommunications market will be fully opened up on January 1, 2003.¹⁸³ A private, foreign-owned company, Cable Bulgaria, is building a countrywide state-of-the-art fiber-optic network to be completed by that date.¹⁸⁴

2. The Irish Tax Treaty System

The Irish income tax treaty network is an important component part of Ireland's successful tax regime.¹⁸⁵ Ireland sees its tax treaties as a mechanism to protect the benefits of its low tax rates from double taxation of corporate profits.¹⁸⁶ Ireland currently has tax treaties with thirty-six countries, including the United States.¹⁸⁷ There are also three signed treaties, not yet in effect, expected to be in force in 2001, as well as three other treaties that are in the process of being negotiated.¹⁸⁸

3. Tax Incentives for Economic Development

Part of Ireland's fiscal policy is directly aimed at economic development.¹⁸⁹ Ireland offers a variety of grants as part of its fiscal incentives.¹⁹⁰ These include capital grants, employment grants, training grants, and research and development capability grants.¹⁹¹

The tax incentives are to "encourage development and sustain investment."¹⁹² These include a low corporate tax rate for industry. Certain activities can get a preferential rate of 10% until December 31, 2002.¹⁹³ These activities include the manufacture of goods in Ireland and international financial services activities carried on at the International Financial Services Centre in Dublin.¹⁹⁴ From January 1, 2003 onward, a corporate tax rate of 12.5% "will apply to Irish trading

183. *Id.*

184. *Id.*

185. See INDUS. DEV. AGENCY (IRELAND), *ACHIEVE EUROPEAN COMPETITIVE ADVANTAGE: GUIDE TO TAX AND FINANCIAL INCENTIVES IN IRELAND* 2-3, available at <http://www.idaireland.com/docs/pdf/Tax.pdf> (last visited Mar. 19, 2001) [hereinafter *IDA IRELAND*].

186. *Id.*

187. *Id.*

188. *Id.* at 3.

189. See *id.* at 4.

190. *Id.*

191. *Id.*

192. *Id.* at 2.

193. *Id.*

194. *Id.* Other noteworthy activities include certain computing, design, and planning services. See *id.*

profits in all sectors.”¹⁹⁵ Dividends and other profit distributions are subject to a withholding tax of 22%, unless overridden by EU rules or tax treaties.¹⁹⁶ Tax incentives are also available with respect to certain patent royalties, expenditures on scientific research, and capital allowances.¹⁹⁷

Certain non-tax factors have been crucial to Ireland's success. First, it is a member of the EU, thereby allowing companies located in Ireland open and duty-free access to a market of 370 million people. Second, Ireland is also a member of the European Monetary Union (EMU) that is moving toward the sole use of the Euro.¹⁹⁸ This eliminates exchange rate risk for companies trading from Ireland with other members of the Euro zone.¹⁹⁹ Third, Ireland provides an English-speaking workforce and close proximity to the United States—important considerations for American firms. Adding these factors to an educated, low-cost workforce, which is also found in other European locations, has been central in generating Ireland's success.²⁰⁰

4. Harmonization, Coordination, and the Irish Model

The EU's goal has always been to develop a single, coordinated economy. Recently, the European Commission is starting to push for greater tax coordination in the EU.²⁰¹ Part of this is aimed at bringing Ireland and its economic policies more in line with the rest of the EU.²⁰² Some are reacting to this tax harmonization as “both unnecessary and potentially damaging.”²⁰³

195. *Id.*

196. *Id.*

197. *Id.* at 3.

198. It is important to note that the United Kingdom is not an EMU member, even though it matches Ireland on the other two non-tax elements of success.

199. Having transactions only denominated in the Euro, as opposed to various currencies, also reduces administrative and other transaction costs.

200. Coleman, *supra* note 179, at 842–43 (indicating that Ireland provides a pool of young, highly-educated workers); IDA IRELAND, *supra* note 185, at 1 (indicating that Ireland's employment costs are among the lowest in Europe).

201. Peter Norman, *Commission to Seek Greater Co-ordination in Euro-zone*, FIN. TIMES, Jan. 25, 2001, at 2.

202. Peter Norman & John Murray Brown, *Brussels Demands Irish Policy Shift*, FIN. TIMES (Jan. 24, 2001), available at <http://news.ft.com/ft/gx/cgi/ftc?pagename=View&c=Article&cid=FT32TURIDIC&live=true&tagid=ZZZGXV4R00> (last modified Jan. 25, 2001).

203. Ed Crooks, *EU Tax Harmony 'Could Cause Damage'*, FIN. TIMES, Nov. 29, 2000, at 2.

C. Singapore

Singapore is a city-state covering only 659.9 square kilometers (257.8 square miles), inhabited by four million people, and lacking any significant natural resources²⁰⁴ that has rapidly grown to be one of the top Asian economies. It is recognized as one of the “Asian Tigers” of economies that grew very fast in the last quarter century. Singapore has become an important regional financial, communications, and administrative center. An important factor for this success has been a continually developing communications infrastructure.²⁰⁵

Singapore’s tax policy is explicitly aimed at both raising revenue and promoting economic development.²⁰⁶ Singapore’s tax system is structured to have a broad tax base, low corporate and individual tax rates, attract foreign investment, and promote risk-taking.²⁰⁷ Singapore’s tax regime includes a significant tax treaty network covering many Asian countries, as well as key developed economies and financial centers. Its development-oriented tax policy focuses on providing a broad spectrum of general tax incentives. This multifaceted tax system has been very effective in attracting foreign investment and providing significant benefits to the local economy and population.²⁰⁸

1. Tax Rates and the Tax Regime

Singapore’s tax regime is an integral part of its overall fiscal policy and is an instrument to raise the tax revenue that is a substantial funding source for government expenditures, as well as an instrument to influence behavior in promoting economic and social goals.²⁰⁹ The two fundamental tenets of Singapore’s tax policy are to keep both corporate and individual tax rates low and to keep the tax base

204. Statistics Singapore, *Top-Line Indicators*, at <http://www.singstat.gov.sg/FACT/SIF/sif1.html> (last visited Mar. 9, 2001); Statistics Singapore, *Minimum National Social Data Set*, at <http://www.singstat.gov.sg/STATSTD/UNSOC/unsoc.html> (last visited March 9, 2001).

205. See, e.g., Anand Menon, *1.3m Broadband Users in Singapore by 2005*, ZDNET ASIA, Mar. 15, 2001, at <http://www.zdnet.com/zdnn/stories/news/0,4586,2697312,00.html> (last visited Mar. 19, 2001) (pointing to the expected rapid increase in broadband Internet access for homes and businesses in Singapore).

206. IRAS, *An Overview*, *supra* note 96.

207. *Id.*

208. *Id.*

209. *Id.*

broad.²¹⁰ The corporate tax structure is aimed at attracting “a good share of foreign investment” and to “make risk-taking worthwhile.”²¹¹

As explained below, Singapore is, in general, a tax jurisdiction that is relatively friendly to foreign business. Singapore has a general corporate tax rate of 26% and no capital gains tax, except for gains on real property held for three years or less.²¹² Generally, Singapore has a withholding tax of 26% on dividends and a withholding tax of 15% on interest, commissions, and royalties.²¹³ Singapore’s tax treaties allow, of course, for lower rates under the appropriate conditions.²¹⁴

The implications for the telecommunications industry are that there are relatively low corporate tax rates that may make foreign investment desirable. Tax rates that are not low enough would not override most other business considerations in determining the location of operations. The relatively low individual tax rates in association with a good infrastructure contribute to the attractiveness of Singapore for setting up operations using highly skilled Singapore residents and expatriates.

2. Tax Treaty System

Singapore has a relatively comprehensive tax system.²¹⁵ It currently has tax treaties with forty other countries.²¹⁶ Singapore’s tax treaty network is useful for telecommunications companies in a number of ways. First, Singapore is comprehensively linked by treaty to many Asian jurisdictions—such as Taiwan (ROC), China, Vietnam, South Korea, Japan, the Philippines, Indonesia, Malaysia, and India²¹⁷—that are often heavily regulated, normally have tax disadvantages, or are sometimes out of the international loop. Second, the network links to tax planning jurisdictions, such as Mauritius, Hungary, and Luxembourg.²¹⁸ Third, Singapore’s treaty network is also linked to certain major developed economies, such as Germany, France, Japan,

210. *Id.*

211. *Id.*

212. See STEPHEN McLAREN CONSULTANTS PTE. LTD., SINGAPORE BUSINESS PROFILE 5, at www.rowbotham.com/knowledgenet/countryprofiles/PROFILE-SINGAPORE.PDF (last visited Mar. 19, 2001) [hereinafter MCLAREN].

213. *Id.* at 7.

214. *Id.*

215. See *id.* (profiling Singapore’s business tax structure).

216. Inland Revenue Auth. of Singapore, *Countries with Tax Treaties*, at <http://www.iras.gov.sg/TaxInfo/treaties.htm> (last modified Dec 22, 2000).

217. *Id.*

218. *Id.*

and the United Kingdom, but not the United States.²¹⁹ Bringing these three characteristics together means Singapore is an important conduit for transactions by corporations with business activities in Singapore's treaty partners. As such, Singapore is an attractive location for regional operational headquarters.

3. Income Tax Incentives for Development

In addition to the traditional goal of revenue raising, Singapore's tax policy also has the explicitly stated objective of promoting economic and social goals.²²⁰ This objective means there are a series of income tax incentives structured so as to promote specific types of economic activities.²²¹ Primarily administered by the Economic Development Board, these incentives include the Pioneer Incentive, aimed at assisting new technology companies and providing a profit-tax exemption for five to ten years; the Development and Expansion Incentive, providing a concessionary income tax rate of not less than 10% for a period of five to twenty years; and an Export of Services & Operational Headquarters incentive, also providing a concessionary income tax rate of 10% for a period of ten to twenty years.²²²

These are the key tax incentives that telecommunication companies can take advantage of to complement the general tax benefits and treaty network that Singapore provides.²²³ The Export of Services & Operational Headquarters incentive reinforces what the tax regime, tax rates, and tax treaties point to—that Singapore is an attractive location for telecommunications regional operational headquarters.

VI. EVALUATING TAX COMPETITION IN THE TELECOMMUNICATIONS INDUSTRY

Tax instruments are, of course, only one category of factors determining corporate investment decisions in the telecommunications industry. Geographical influences, market size, and other economic considerations are some of the alternative factors that have been discussed above. Some academic literature reports, in fact, that these factors swamp any tax considerations in influencing corporate

219. *Id.*

220. IRAS, *An Overview*, *supra* note 96.

221. MCLAREN, *supra* note 212, at 10.

222. *Id.*

223. *See id.* 4–10.

investment decisions.²²⁴ In today's telecommunications industry, however, tax considerations can have a determinative impact on corporate investment decisions.

From the discussion above, the tax considerations can be grouped into three useful categories: (1) tax considerations that impact the access of a market to telecommunications services, (2) tax considerations that impact the location of support services, including operational headquarters, and (3) tax considerations that influence financial portfolio choices and the international movement of financial assets.

A. Tax Considerations and Access to Telecommunications Services

Access to particular telecommunications services is not always available. If tax considerations have a significant impact on telecommunications investment of this type, then these considerations are determinative of whether the corporation provides the services or not. Telecommunications investments are location-specific. Such investments are made because the anticipated profits are sufficiently high to encourage companies to place their investments in a specific location. The local tax rates may determine whether the level of absolute profits is high enough to stimulate the private sector to carry out the investment and generate the employment. A more subtle impact may arise if these tax considerations result in some type of provision of partial or lower grade services, or result in delaying the investment.

These situations may correspond to what have been labeled "demand jurisdictions."²²⁵ Large demand jurisdictions are those that provide large consumer markets²²⁶ and thereby attract the large transnational corporations. Because the size of the market and the potential for substantial sales is large, the absolute profit threshold required for these firms to invest in a jurisdiction is easily met in these markets. Tax incentives and government grants can push a jurisdiction over the required threshold. The level of absolute profitability required may be mitigated by engineering considerations.²²⁷

A telling illustration is provided by the large subsea fiber-optic cable systems. Often, they bypass countries without landing there. For example, 360networks' 360americas fiber-optic cable network linking

224. Avi-Yonah, *supra* note 1, at 1643-48.

225. *See id.* at 1587.

226. *Id.* at 1586.

227. It may be the case that a terrestrial cable connecting two large markets needs to pass through a small market for engineering reasons and, therefore, makes it cost-effective to service the small market that otherwise would not have received service.

North and South America only lands in Bermuda, Venezuela, Brazil, and Argentina.²²⁸ This network bypasses all other Caribbean countries and Guyana, Surinam, French Guiana, and Uruguay on the eastern coast of South America.²²⁹ It also does not link to the western side of Central and South America.²³⁰ While market size and development play an important role in this decision, it is plausible that government investment and tax incentives could be sufficient to create landings of a system in countries currently bypassed.

The timing question can also be illustrated by the construction of international fiber-optic networks. For example, 360networks' European network was initially built to cover England, northwestern Europe, and Germany.²³¹ It is now being extended to cover southwestern and part of central Europe.²³² Currently, there do not seem to be any plans to extend the network to most of central and eastern Europe.²³³ Clearly, different markets are receiving earlier access to modern telecommunications networks than others.

B. Tax Considerations and the Location of the Production of Goods and the Creation of Support Services

Much more sensitive to tax considerations are the decisions determining the location of mobile or footloose business activities. The tax considerations that affect the location of business activities can be divided into two categories that are relevant to the structure of the telecommunications industry. First are the considerations that affect the location of production and manufacturing operations. Second are the tax considerations that influence the location of support services.

1. Tax Considerations and the Production of Goods

The stereotypical tax competition scenario deals with the determination of the location of production of goods. Intertwined with other globalization considerations, such as labor costs and exchange rates, tax rates and other tax characteristics of a tax regime may be determinative in a transnational corporation locating manufacturing

228. 360networks, *South America*, at http://www.360.net/Our_Networks---South_America.asp (last visited Mar. 13, 2001).

229. *See id.*

230. *See id.*

231. 360networks, *Europe*, at http://www.360.net/Our_Networks---Europe.asp (last visited Mar. 13, 2001).

232. *Id.*

233. *See id.*

operations in one jurisdiction, as opposed to another.²³⁴ Such "production tax havens" are important in determining the international allocation of production facilities and giving transnational corporations bargaining strength against other jurisdictions.²³⁵ Such considerations may lead to the closing of a plant in the United States and a shifting of the operation to other countries.²³⁶

With respect to the telecommunications industry, these considerations for the location of production facilities are only important to that segment of the industry involved in the manufacture of consumer products or component parts used in telecommunication infrastructure. Clearly, manufacturers of mobile phones and other consumer communications products such as Nokia, Ericsson, and Motorola have manufacturing operations in many different countries.²³⁷ The same can be said for equipment manufacturers such as Nortel,²³⁸ Alcatel, Lucent, and Cisco Systems.

2. Tax Considerations and Support Services

Some constituent elements of providing telecommunications services can—within reason—be located anywhere. These include operational headquarters, planning and engineering services, billing and finance services, and the like.²³⁹ In fact, the better international communications are, the less there is a need to locate these activities in any particular location.²⁴⁰ In contrast to the decision to provide particular customer telecommunications services, these support services investment decisions are basically a question of where to locate. The

234. Avi-Yonah, *supra* note 1, at 1590–91 (discussing effects of tax considerations on location decisions).

235. *See id.* at 1577.

236. Public Citizen, *A Sampling of NAFTA Related Job Loss*, at <http://www.citizen.org/pctrade/taa97acs/KEYTAA.html> (last visited Apr. 3, 2001) (pointing to Guess Inc.'s shift of sewing operations from Los Angeles to Mexico and South America).

237. *See, e.g.*, Jonathan Collins, *Manufacturing Trouble?*, TELE.COM, Feb. 20, 2001, at <http://www.teledotcom.com/article/TEL20010216S0018> (last visited Apr. 05, 2001) (indicating that Ericsson is transferring facilities in Brazil, Malaysia, Sweden, the United Kingdom, and the United States and that Nokia is laying off employees in U.S. manufacturing plants and increasing production in Korea and Latin America).

238. Nortel Networks, *Corporate Information*, at <http://www.nortelnetworks.com/corporate/> (last visited Apr. 3, 2001) (indicating that "Nortel Networks has offices and facilities in Canada, Europe, Asia-Pacific, Caribbean and Latin America, the Middle East, Africa, and the United States.").

239. *See* Avi-Yonah, *supra* note 1, at 1591 (discussing evidence that tax considerations, rather than other factors, dictate location decisions for businesses' administrative centers).

240. *See id.* at 1590. Modern telecommunication technology allows companies to coordinate production in different countries. *Id.*

decision is already made that the investment will happen; it is just a matter of determining its location. As such, tax considerations are more likely to be important in these types of decisions, as compared to those “yes” or “no” decisions for providing customer services.

If companies only need to decide where to locate their investments, then small changes in the tax considerations may affect the decision. On the other hand, if companies are still deciding whether to invest at all, companies would look at the profitability of the investment before approving it; then once companies find that the investment is sufficiently profitable and approve it, additional tax incentives will not matter in carrying out the investment. In this case, tax incentives matter only if they change an investment from insufficiently profitable to sufficiently profitable. The lack of tax incentives is only important if they prevent an investment from being sufficiently profitable.

C. Portfolio Considerations and the Movement of Financial Assets

The third category of tax considerations incorporates those considerations that revolve around the shifting of income, the transfer of financial assets, and traditional tax avoidance behavior. This is the category that matches with the OECD concern for harmful tax competition.²⁴¹ The OECD’s concern is focused on low or zero tax rates that exist in combination with “no effective exchange of information, lack of transparency, and ‘no substantial activities’/ring fencing.”²⁴² These activities may affect the income tax base in a way that is separate from the creation of business activities and employment.

In essence, telecommunications raises few special concerns in this area. One concern is that traditional tax avoidance behavior, such as transferring financial assets, is interrelated to considerations in the two categories discussed above.²⁴³ Portfolio and financial tax factors may help determine the absolute profitability of foreign investment in the first category and the relative profitability in the second category. The nature and enforcement of transfer pricing rules may influence the allocation and possible shifting of income from one tax jurisdiction to a lower tax jurisdiction. Sourcing of income rules are also important.²⁴⁴ Most of it comes down to rules that exist in financial centers and how

241. See OECD, BRIEFING PAPER, *supra* note 128, at 1.

242. *Id.* at 2.

243. See *supra* Part VI.A–B.

244. See *supra* Part V.A.4 (discussing IRS Proposed Regulation § 1.863-9 on sourcing rules applicable to communications income).

other jurisdictions allow companies to transfer income and financial assets to more favorable tax jurisdictions.

VII. FUTURE TAX CHALLENGES FACING TELECOMMUNICATIONS COMPANIES

The world facing telecommunications companies will keep changing. New technologies and products are continually being developed. By merger, acquisition, privatization, and regulation, the players in the telecommunications industry are dynamically changing.²⁴⁵ Tax authorities are searching for ways to have stronger enforcement of tax laws, trying to create greater tax harmonization, and are explicitly attacking harmful tax competition.²⁴⁶

In addition to these types of changes, the telecommunications industry will be facing the challenge of extending service to geographical areas, industries, and people currently under-served. Development questions and incentives will be important. The success or failure of the industry in addressing such questions will be seen most starkly in Africa.

A. Tax and the Provision of Telecommunications to Under-Serviced Areas and People

One of the key challenges facing national governments and telecommunications companies is the inadequate access to telecommunications services that some people currently experience. The African example discussed below is the most glaring situation that needs addressing.²⁴⁷ Creative planning involving transnational telecommunications companies, multiple national governments, and international organizations will be needed to effectively accomplish this goal. Multinational tax incentives have the potential to play a crucial role in doing this. There is significant room for a symbiotic relationship between the private sector and the public interest.

Some telecommunications carriers are moving aggressively into underdeveloped countries.²⁴⁸ Some carriers are rejecting the old business model that involves initially establishing a company at home

245. See *supra* Part III.D.

246. See *supra* Parts IV.D, V.A.3.

247. See *infra* Part VII.B.

248. Joyita Haldar, *Carriers Move Aggressively into Underdeveloped Countries*, TELE.COM, Jan. 22, 2001, at <http://www.teledotcom.com/article/TEL20010119S0023> (last visited Mar. 19, 2001).

and then expanding into developed markets such as Europe and Japan.²⁴⁹ Instead, they are avoiding the saturated hub markets and moving directly into developing markets.²⁵⁰ Fusion Telecommunications International is an example of such a company that is using domestic partners to move directly into such markets as Peru, Argentina, and India.²⁵¹

B. The Africa Question

Africa is the most underserved continent in terms of provision of and access to telecommunications services. For example, Africa has only 2.45 main telephone lines per 100 inhabitants, compared to 8.32 for Asia, 33.13 for the Americas, 38.48 for Europe, 40.29 for Oceania, and a worldwide average of 15.16.²⁵² Africa, on average, lags behind the rest of the world in a similar fashion when it comes to cellular subscribers.²⁵³ It is important to note, however, that the percent of total telephone subscribers in Africa that are also cellular subscribers is, on average, the same as in the other continents.²⁵⁴ Of the world's 260 million Internet users in 1999, only 2.7 million or 1.0% were African.²⁵⁵ Of the African Internet users, 1.8 million or 68.5% were inhabitants of South Africa.²⁵⁶ Of Africa's estimated 5.9 million personal computers, 2.4 million or 40.8% are in South Africa, with Egypt having 750,000 or 12.8%, and Nigeria having 700,000 or 11.9%.²⁵⁷

249. *Id.*

250. *Id.*

251. *Id.*

252. Int'l Telecomm. Union (ITU), *Basic Indicators: World*, Jan. 22, 2001, available at http://www.itu.int/ti/industryoverview/at_glance/basic99.pdf (last modified Jan. 22, 2001). There is wide range of usage within Africa, ranging from a high of 38.86 main telephone lines per 100 inhabitants of Réunion, to 13.77 for South Africa, to many countries that have less than one main telephone line per 100 inhabitants. In the United States there are 68.18 main telephone lines per 100 inhabitants. *Id.* All these figures are for 1999. *Id.*

253. Int'l Telecomm. Union (ITU), *Cellular Subscribers: World*, Jan. 2, 2001, available at http://www.itu.int/ti/industryoverview/at_glance/cellular.pdf (last modified Jan. 22, 2001) (indicating that, in 1999, Africa had 1.02 cellular subscribers per 100 inhabitants compared to 16.45 for the Americas, 4.52 for Asia, 22.35 for Europe, and 24.87 for Oceania).

254. *Id.* On average, 29.1 percent of total telephone subscribers are cellular mobile subscriber in Africa, while 33.2 % in the Americas are, 35.2 % in Asia, 36.7 % in Europe, and 38.2 % in Oceania. *Id.* The number of users per 100 inhabitants, of course, varies widely among the different African countries. *Id.*

255. See Int'l Telecomm. Union (ITU), *Internet Indicators: World*, July 10, 2000, available at http://www.itu.int/ti/industryoverview/at_glance/Internet99.pdf (last modified July 10, 2000).

256. *Id.*

257. *Id.*

The African telecommunications question is how to connect fifty-five ITU members, with extremely different economies and telecommunications infrastructures, with each other and to global networks. The ITU is promoting telecommunications business fairs in order to help bridge the digital divide that exists between Africa and much of the rest of the world.²⁵⁸ African countries recognize that privatization and liberalization are important in developing Africa's telecommunications sector.²⁵⁹

Some private African companies are leading the push.²⁶⁰ The largest Pan-African telecommunications operators include Mobitel of Egypt and M-Cell and Econet Wireless of South Africa.²⁶¹ While there is strong support from the World Bank and the IMF to develop and open up Africa's telecom markets, Africa is still considered over-regulated and fraught with uncertainties.²⁶² Deregulation and privatization are slow and difficult, requiring court cases in some instances to force open markets.²⁶³

VIII. CONCLUSION

From what has been discussed above, there is a worldwide process of tax harmonization occurring that is the logical outcome and corollary to the general globalization process. The challenge for tax planners will be to find ways to take advantage of, adapt to, and find benefits from the international tax harmonization process. Tax planners will be less able to rely on a divide-and-conquer strategy to obtain tax incentives, benefits, and preferences.

Within the telecommunications industry, globalization, the attack against harmful tax competition, and the trend toward tax harmonization can be expected to create shifting opportunities for tax planning. Because certain business groups and countries are behind the curve in the globalization process, economies and sectors will continue to open up to international competition and privatization. As this process matures, the national and international interest will shift toward finding

258. Int'l Telecomm. Union, *ITU Telecom Africa 2001 Overview: Bridging the Digital Divide*, at <http://www.itu.int/AFRICA2001/exhibition/flyer.html> (last visited Feb. 15, 2001).

259. *Id.*

260. Nick Wachira, *One Man's Fight to Wire Africa*, WIRED NEWS, Mar. 15, 2001, at <http://www.wired.com/news/infostructure/0,1377,41407,00.html> (last visited Mar. 19, 2001).

261. *Id.*

262. *Id.*

263. *Id.* (describing Econet Wireless' cases against the government of Zimbabwe to declare the incumbent company's monopoly unconstitutional and get a GSM network license).

mechanisms to give under-served areas and people access to telecommunications services. Development tax incentives, such as those provided by Singapore and Ireland,²⁶⁴ may be crucial in providing the absolute profits required to stimulate the private investment needed to create the appropriate telecommunications infrastructure and services.²⁶⁵ The international telecommunications companies can play an important role by making tax authorities aware of the significance of this.

To the extent the OECD is successful at attacking harmful tax competition, financial centers will be a smaller component of tax planning. Such changes may create greater costs and rewards for effective planning in this area. Tax planning resources may also be shifting to other activities.

International tax competition for mobile production, services, and headquarters activity is likely to be negatively affected by tax harmonization, to whatever extent it is achieved. This harmonization may be partially created via ancillary effects generated by the attack on harmful tax competition. It may be achieved through explicit tax harmonization policies, such as those promoted by certain parties within the European Union. The adoption of the OECD's transfer pricing guidelines by more nations is also adding to global tax harmonization. Tax harmonization will lead to non-tax factors having a more dominant effect on where footloose operations will be located.

The trend against harmful tax competition and for tax harmonization will tend to create a greater need and opportunity for symbiotic relationships between transnational corporations and tax authorities in creating business development incentives that meet the needs of both. In other words, these tax trends will reinforce the pressures created by the maturing globalization process in telecommunications. Both trends push for creative ways to enhance development of telecommunications in under-served areas. Coordinated tax incentives may be crucial here. The African example will be a clear illustration of the willingness of national and international tax authorities to create a tax regime supportive of the overall development of the telecommunications sector.

264. See *supra* Part V.B-C.

265. See *supra* Part VI.A.

