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The WTO and China's ban on foreign investment in telecommunication services: a game-theoretic analysis

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Abstract

China's telecommunication services sector was closed to foreign direct investment (FDI) during the 1990s. The official ban on FDI persisted despite China's enormous demand for capital to build out its telecommunication infrastructure. It remained in place despite statements from Western analysts that it was not sustainable and repeated predictions that it was about to be relaxed. What created the ban, why did it stay in place so long, and why did China suddenly offer, in its World Trade Organization accession agreement with the United States, to change it significantly? This paper identifies the domestic policy bargains that supported the FDI restriction. A simple game theory model is used to analyze the way four players — (1) the Chinese state, (2) the Ministry of Information Industry/China Telecom, (3) Telecom's domestic rivals, and (4) foreign strategic investors — interacted over access to foreign capital and technology. We contend that this analytical framework provides a much more solid understanding of the forces shaping Chinese telecommunications policy than simplistic extrapolations of Western notions of liberalization and privatization. The model is then used to assess whether China's willingness to open up to foreign strategic investment in the sector was driven primarily by its own domestic reform process, or by the external pressures generated by its desire to join the WTO. Our model predicts that China would *not* have opened up to foreign investment in telecommunication services without the need to bargain for WTO accession. It is our conclusion that the state's desire for WTO accession tipped the game's equilibrium sufficiently to alter the FDI ban. © 2000 Elsevier Science Ltd. All rights reserved.

Keywords: China; WTO; Foreign direct investment (FDI); Game theory

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1. Introduction

During the 1990s, China came to be seen as an especially attractive site for foreign direct investment (FDI). The vast potential of the "China market", China's low labor costs, favorable tax policies, and the stability of its business climate relative to other developing countries stimulated a gigantic global reallocation of capital and labor resources. More than US$200 billion in FDI flowed into mainland China from 1990 to 1997, accounting for 30% of the total foreign direct investment sent to all the world's developing economies during that period (China State Statistical Bureau, 1998).[1]

China is now building what will inevitably become the world's largest telecommunications network. The Chinese leadership has made no secret of its belief in the importance of information and telecommunication products and services to China's economic aspirations.[2] To develop its infrastructure, China must invest large amounts of capital and harness new levels of managerial and technological know-how. Nevertheless, during the whole of the 1990s China imposed some of the world's tightest restrictions on foreign investment in telecommunication services. Foreign businesses were not allowed to own, operate, or manage telecommunication networks or services in China.

China's rejection of FDI in telecommunication services was unusual relative to other economic sectors in China or to other countries at a similar level of development. In telecommunications equipment manufacturing, equity joint ventures and wholly foreign-owned enterprises were commonplace in China, and took in billions of US dollars early in the reform process.[3] Other developing nations in Latin America and Asia opened their doors to foreign direct investment in telecommunication services during the decade.[4] Evidently, despite its need to invest in a large-scale service infrastructure and the ready availability of capital from foreign sources, China was willing to forego what seems like a natural trade — resources for market access — in order to achieve other objectives. China's closed door in services played a major role in its negotiations to enter the World Trade Organization (WTO). The United States, the European Commission and Japan all made opening up telecommunication services a major point of contention (Dow Jones International News, 1999a, b).[5]

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[1] Overseas Chinese invested $130 billion, or 60% of the total FDI in the 1990s.

[2] Wu Jichuan, the MPT Minister, said in April 1995 that "insufficiency in telecommunications capacity and shortage of services have been a major factor affecting China's opening up to the outside world and restricting China's economic growth" (*Financial Times*, October 3, 1995, p. 27); A report used within the former Ministry of Posts and Telecommunications shows that Deng Xiaoping agreed that the modernization of communications should be put before the 'four modernisations of China' (Gao, 1991).

[3] Mueller and Tan (1997, 165. Appendix C, pp. 131–135) note that nearly every major telecommunication equipment manufacturer in the world has a joint venture or wholly owned manufacturing facility in China.

[4] The General Agreement on Trade in Services of the WTO concluded its negotiations on Basic Telecommunication Services on 15 February, 1997. Fifty-five WTO members representing 69 governments made commitments to permit varying levels of market access and foreign investment in telecommunication services. India, for example, permitted 25% foreign equity, Indonesia 35%, the Philippines 40%.

[5] Both articles specifically mention negotiations on telecommunication services; see also Low and Mattoo (1998), and Fukasaku, Ma and Yang (1999).