

BOOK REVIEW

Telecommunication Markets - Drivers and Impediments

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This book is a collection of articles that address several of the most relevant topics regarding the development of telecommunications markets. In this constantly evolving field, it is helpful to find in a single volume research that covers regulatory, economic and legal aspects of telecommunications markets. This book provides the reader with a global understanding of many of the current major discussions and debates in this area.

The book is organized around 27 chapters that are divided among the following seven parts: theoretical perspectives, Internet issues, broadband issues, mobile drivers, business strategy, emerging markets and new perspectives on the regulatory framework. The majority of the authors are affiliated to universities and research institutes, which lends the book an academic flavour. With the exception of a few articles that require a high proficiency in economics, any reader with a basic knowledge of regulatory topics or economics will be able to understand most of these essays. The editors have a broad experience in writing and editing books about the telecommunications industry, which is reflected in the careful selection of the articles included in the volume.

The introduction to the book, written by the editors, explains the relevance of every chapter and summarizes each one of the chapters.

Part 1 contains four chapters dedicated to theoretical perspectives. Izak Atiyas, Toker Doganoglu and Martin Reichhuber analyse the general access payment mechanisms. By means of a stylized model of retail competition between an entrant and an incumbent, the authors demonstrate that any pair of retail prices can be implemented if the regulator decides to enforce a simple linear access payment mechanism in retail prices. Margit Vanberg examines the impact of network externalities related to Internet service provision on competition in the Internet backbone services market. The author concludes that competition in the transit market is strong and, as a consequence, it would be difficult for Tier-1 ISPs to discriminate against ISPs located on lower levels of the Internet hierarchy. Hitoshi Mitomo, Tokio Otsuka and Kiminori Nakaba use concepts of behavioural economics to explain the flat-rate preferences of post-paid mobile phone subscribers in Japan. By using an empirical study with data obtained from a survey, the authors identify those factors that explain the consumers' inclination toward flat rates. The study made by Morten Falch, Anders Henten and Reza Tadayoni explains the recent history of the

regulation of international roaming charges in the European Union (EU). The chapter presents an assessment of roaming costs for different international roaming scenarios and describes how an agreement about international roaming regulation among different EU institutions was achieved.

Part 2 covers Internet issues; beginning with a chapter by Mélisande Cardona, Anton Schwarz, B. Burcin Yurtoglu and Christine Zulehner on substitution patterns in the broadband Internet services market in Austria. The results provided in the chapter suggest that the cable and DSL broadband services are probably part of the same market at both the retail and wholesale levels. It is also explained why Austria is one of the leading countries in mobile broadband penetration. This part contains two essays that analyse the topic of search engines in the European Union, albeit with different approaches. On the one hand, the study by Boris Rotenberg and Ramón Compañó analyses the copyright laws in the European Union that affect the use of search engines to retrieve audio-visual content information. On the other hand, Nico van Eijk describes the business models of search engines and analyses regulatory aspects of search engines in the European Union. Due to the fact that search engines are bottlenecks in the access to information, the author argues that it should be investigated whether competition laws can be applied in this domain. The econometric models employed by Leonel Cerno and Teodosio Pérez Amaral are used to identify the variables that affect e-commerce use in Spain. The analysis shows that the main factors that have a positive impact on the probability of purchasing through the Internet are accessibility to the Internet, income and gender.

Part 3, which is entitled Broadband Issues, consists of three chapters that describe aspects of broadband diffusion in developed economies. Massimo Colombo and Luca Grilli develop an econometric model to study the diffusion of broadband-based applications in small and medium Italian enterprises. The study by Nejc Jakopin sheds light on the drivers and inhibitors of broadband Internet adoption in Europe. The chapter begins with a comprehensive review of previous studies of broadband adoption factors, and then describes the correlation analysis conducted to identify the importance of each one of the indicators used in the study. Koshiro Ota analyses the telecommunications policies adopted in Japan that make this country one of the leaders in broadband diffusion. The study explains the broadband market in Japan, the strategies promoted by the government and the role played by the incumbent operator NTT in FTTH deployment.

Mobile drivers are explored in Part 4. Jörn Kruse discusses how Mobile Termination Carrier Selection (MTCS) could transform the mobile termination service market into a competitive market. The author analyses different regulatory and economic implications of MTCS and concludes that the implementation of MTCS could lead to the deregulation of termination rates in the mobile termination market. Jeffrey Rohlfs examines several aspects associated with the setting of mobile termination rates in the European Union. Some issues described in the chapter are the specification of the relevant product market, the determination of market power, the assessment of countervailing buyer power, regulatory intervention and the relaxing of regulation. A model developed by Jonathan Sandbach for the calculation of competitive neutral national roaming access prices is applied to a scenario where the incumbent is restricted to a

GSM 900 network against a new entrant that is deploying a WCDMA 2.1 GHz network. Peter Curwen and Jason Whalley discuss whether 3G licensing in Europe has been successful in the promotion of competition in the mobile market. The chapter shows that a number of entrants have emerged from the licensing process and explains the market strategies of four operators who used this process to enter into new markets. Delphine Riccardi, Stéphane Ciriani and Bertrand Quélin study the factors that motivate the success of an entry in a mature, regulated industry. By means of an econometric analysis, the authors evaluate the impact of the market structure and regulation on the number of Mobile Virtual Network Operators (MVNOs).

Part 5 covers business strategy issues. Mark de Reuver, Harry Bouwman and Guadalupe Flores Hernández analyse technological design options of Mobile Web Services (MWS), an emerging platform that can be used for mobile services deployment and that might become an alternative to the IMS. They present the results of an expert survey about MWS features and identify the design issues that still need to be solved. Pieter Ballon, Leo Van Audenhove, Martijn Poel and Tomas Staelens review the business models of 15 wireless city networks located in the European Union and the United States. They classify the selected cases in six typical business models and compare these models in terms of inputs from public bodies and leverage and returns obtained by them. The complex and unpredictable motion picture industry in the United States is investigated by Patricia Longstaff, with the author drawing conclusions that may be helpful for the design of the business strategy of those companies that find themselves in unpredictable environments. Olaf Rieck and Canh Thang Doan discuss the conditions under which mergers and acquisitions (M&As) in the telecommunications industry have been successful. By using an event study research method that traces market reactions to M&A announcements, they analyse the shareholder value effects of M&A.

Part 6, which deals with emerging markets, begins with a chapter by James Alleman and Paul Rappoport about the demand of services in Next Generation Networks (NGNs). They analyse the expenditure share for telecommunications services and the demand for services such as music downloads, VoIP, IPTV and mobile telephony in several countries. Johannes Bauer, Imsook Ha and Dan Saugstrup compare infrastructure, policy and business aspects of mobile TV in South Korea and the United States. They identify obstacles to the design of mobile TV market environments in both countries and provide recommendations that could be useful in countries that are still at an early stage in the design of mobile-video and mobile-TV. Paul Rappoport, James Alleman and Gary Madden provide a cross-country assessment of the digital divide by examining the shares of telecommunications services expenditure. Among other findings, the analysis suggests that 2-4% is a typical communication expenditure share in developed countries. Svetlana Petukhova and Margarita Strepetova describe the status of the ICT sector in Russia, the role of this sector in the economy and the importance of techno-parks and ICT professional education for ICT development in Russia.

The first two chapters from Part 7 provide new perspectives on the European regulatory framework, whereas the third is a discussion about the relationship between innovation and regulation. Justus Haucap discusses the benefits and costs of a centralized regulator for the European telecommunications sector. With the goal of preventing the overregulation of

telecommunications markets, the author proposes a new allocation of competences between the National Regulatory Agencies and the European Commission. Maartje de Visser analyses an institutional model that could better address the drawbacks of the enforcement of the European Union's electronic communications framework. The chapter compares three alternative models for the administration of electronic communications law: the centralized enforcement model, the decentralized enforcement model and the agency model. Finally, Pierre-Jean Benghozi, Laurent Gille and Alain Vallée study the relationship between regulation and innovation in the digital economy. They analyse the sources of tension between regulation and innovation, the role of innovation in the digital economy and the regulatory implications of innovation.

One question that arises after reading the 525 pages of this volume is whether the major drivers and impediments that affect the development of telecommunications markets have been covered. The answer is positive, especially if it is considered that the editors made it clear from the beginning that the book covers a broad range of subjects, but not all of them. With the exception of a few subjects that were not discussed in depth in the volume, such as the debates about the regulation of Next Generation Networks and spectrum management that will affect fixed and mobile broadband access markets, the book provides the reader with different perspectives on many of the most controversial issues related to the development of telecommunications markets. Another feature of this book is that much of the analyses and studies included in the volume is based on data and information taken from telecommunications markets located in Europe.

The book is composed of essays that can be read independently and the clarity of the exposition permits the reader to understand without difficulty the messages delivered by the different authors. In the most theoretical chapters, the references sections cover the most relevant contributions made to the field.

To summarize, this book is recommended to anyone who aims to have a profound understanding of many of the major ongoing debates that are being conducted within the policy-making, academic and industry communities regarding the development of telecommunications markets. The studies presented in the volume invite the reader to critically reflect on a wide range of key issues that affect this development, which makes the book attractive to both beginners and experts in the field.

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