

Econometric Evidence on the Impacts of Privatization, New Entry, and Independent Industry Regulator on Mobile Network Penetration and Expansion

February 2009

 Impacts of
 Privatization,
 New Entry, and
 Independent
 Industry
 Regulator on
 Mobile Network

BACKGROUND

- With continuous advances in wireless network technology, the mobile network sector is now the most dynamic sector in telecommunications in the world. Moreover, mobile network services have proved to be formidable substitutes for fixed line telephony.
- Since the late 1990s, when reformers in Eastern Europe and the former Soviet Union recognized that ignoring the institutional and competitive framework was a mistake in the method of reforming state-owned enterprises, many countries around the world have been establishing an industry-level independent regulatory agency to promote competition and effective regulation in the utilities. Since then, the impact of the existence of an independent regulator on industry performance has been fiercely debated. However, the literature does not, with rare exception, pay much attention to the explicit effects of an independent regulator on the performance of telecoms in general and on the mobile network sector in particular.

METHODOLOGY

- The author reports the findings of a study examining the impacts of reforms on the mobile network market; these include privatizing state-owned telecoms providers, introducing competition and establishing an independent industry regulator.
- Econometric analysis is conducted on national-level mobile market data compiled by the author from 29 OECD countries and China over the time period 1991-2006.

KEY FINDINGS

- Econometric analysis confirms that the introduction of new entry is, in general, positively correlated with mobile network penetration and expansion. While duopoly competition is not sufficient for better mobile network development, the third-to-fifth entries are jointly associated with the highest mobile penetration, and the third entry is also associated with the fastest network expansion.
- The diminishing effects of entrants after the fifth suggest that too many entrants can eventually exert a negative influence on network expansion: over-intense competition may result in fewer incentives to improve service quality as services become less profitable.

CCP Policy Briefing

February 2009

 Impacts of
 Privatization,
 New Entry, and
 Independent
 Industry
 Regulator on
 Mobile Network

CCP Policy Briefing

- The analysis also points to the crucial role of an independent regulator in privatized mobile markets. Without an independent regulator, privatization is on average negatively correlated with mobile network expansion, even in certain competitive market environments.
- The results also imply that mobile service price and labour productivity partially mediate the effects of regulatory reforms, in particular, of new entry and an independent industry regulator. These mediation effects suggest that the reforms affect network penetration and expansion partially through their effects on price reduction and labour productivity improvement.

POLICY ISSUES

- The introduction of new entry is, in general, the most effective method of promoting mobile network penetration and expansion.
- Privatization alone yields few benefits to mobile penetration. Even with certain degrees of competition, privatization is, on average, harmful, unless there is an independent industry regulator.
- An independent regulator not only ensures good regulatory governance, but it has explicit effects on certain performance measures, such as mobile network penetration and expansion.
- It is imperative for reformers to foster an effective competitive environment rather than rushing into massive privatization. More importantly, an appropriate level of competition (neither too little nor too much) is required in order to realise benefits in the form of economic performance and efficiency.

THE CCP

The ESRC Centre for Competition Policy (CCP), at the University of East Anglia, undertakes competition policy research, incorporating economic, legal, management and political science perspectives, that has real-world policy relevance without compromising academic rigour.

FOR MORE INFORMATION

The full working paper (CCP Working Paper 08-35) and more information about CCP and its research is available from our website: www.ccp.uea.ac.uk

ABOUT THE AUTHORS

- Yan Li is currently a third year PhD student (with full ESRC scholarship) in CCP, UEA, working on a project investigating the relationship between regulatory reforms (privatization, competition, and independent regulator) and measures of market performance and efficiency in the telecommunications sector. She also obtained a masters degree in media economics with distinction from UEA.

W: www.ccp.uea.ac.uk
 T: +44 (0)1603 593715
 A: UEA, Norwich, NR4 7TJ

