



ELSEVIER

Contents lists available at [ScienceDirect](#)

Telecommunications Policy

URL: www.elsevier.com/locate/telpol

Evidence for a Ladder of Investment in Central and Eastern European countries[☆]

Goran Serdarević^{a,b,*}, Matt Hunt, Tom Ovington^a, Clive Kenny^a^a Frontier Economics Ltd., 71 High Holborn, London WC1V 6DA, United Kingdom^b Charles University in Prague, Institute of Economic Studies, Faculty of Social Sciences, Opletalova 26, Prague 110 00, Czech Republic

ARTICLE INFO

Available online 31 March 2016

Keywords:

Broadband
Unbundling
Copper
Fibre
Ladder of Investment
Central and Eastern Europe

ABSTRACT

The approach to liberalisation of European telecommunications markets followed what has become known as the “Ladder of Investment” (LoI). Under this model, regulation is designed to enable entrants to make progressively greater investments in their own networks, whilst decreasing their dependence on the network of the incumbent fixed operator. The ultimate goal of the LoI approach is to achieve, where feasible, inter-platform competition.

However, it is unclear, from a theoretical perspective, whether the LoI approach to regulation will necessarily lead to inter-platform competition. Whether and under what circumstances it would is thus an empirical question. There is a rich literature which has empirically estimated the degree to which the LoI describes the evolution of competition in Western European (WE) countries. The contribution of this paper is to empirically test whether the LoI also explains the development of telecommunications markets in Central and Eastern European (CEE) countries.

Our analysis finds that the telecommunications entrants in CEE countries largely chose to by-pass the LoI, by directly investing in their own networks. There are good reasons for this, as some of the necessary conditions which underpin the LoI theory, such as good quality and widely available copper networks, and the relatively high cost and risk of investing in alternative infrastructure, do not necessarily hold in CEE countries.

The implication of this result is that the LoI should not be considered a universally applicable theory which explains the evolution of competition in all broadband markets. Rather its applicability depends on several country specific factors which were not present to the same degree in CEE countries compared with WE countries. Policy makers, regulators and competition authorities therefore need to take this into account when dealing with the issues of entry, investment and competition in broadband markets across the CEE region.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

The objective of EU policy making in the area of telecommunications has been to improve consumer outcomes by seeking to facilitate, amongst other things, competition between fixed line operators.

[☆] The opinions expressed in this article are the authors' own and do not reflect the view of Frontier Economics Ltd.

* Corresponding author at: Charles University in Prague, Institute of Economic Studies, Faculty of Social Sciences, Opletalova 26, Prague 110 00, Czech Republic.

E-mail address: goran.serdarevic@gmail.com (G. Serdarević).

If consumers can choose between competing operators which offer fixed telecommunications services, then regulation of incumbents' services could be rolled back. The most desirable form of competition would be 'inter-platform' competition (or infrastructure or end-to-end competition), where alternative fixed operators build their own networks to compete with the fixed incumbents. Thus inter-platform competition¹ offers the greatest potential to roll back regulation and rely, to a greater extent, on competition to improve consumer outcomes.²

Furthermore, it is generally accepted that, as inter-platform competition allows competition across the whole of the value chain, it increases the potential for innovation, and improves the incentives to invest and to decrease costs.³ All else equal therefore, where feasible and sustainable, inter-platform competition is more desirable than access-based competition (different providers supplying services to consumers, using wholesale access products based on a fixed incumbent operator's infrastructure).

However, the extent to which inter-platform competition is feasible has been widely debated. Certain parts of an incumbent's network, in particular large parts of the access network, have been considered not to be replicable. This is primarily because it has been considered that it is not economically viable for new entrants to invest in the sunk costs involved with rolling-out a new access network, where an existing network is already present, due to the very significant economies of scale.

The regulatory policies to achieve the goal of competition, and mitigate the causes of market failure, have evolved over time. The development of a Europe wide regulatory policy in telecoms markets can be traced back to the 1998 telecommunications package. This package liberalised entry into telecoms markets in the European Community and set out rules on interconnection between networks. In implementing the law, national regulators in Western Europe (WE) countries required wholesale access products which enabled the reselling of the incumbent's voice services (using wholesale products such as carrier pre-selection (CPS)). While the aim was to improve competition, the results were rather limited. On the one hand, reselling of the incumbent's products allowed some competition as entrants could use CPS to build a customer base. On the other hand, these regulations proved insufficient to promote infrastructure based entry. Incumbent's market positions in the fixed voice segment remained strong.

The 2002 telecommunications package was an attempt to improve the efficacy of telecommunications regulation and enable a greater degree of infrastructure-based competition. It developed regulation in a number of ways which reflected the LoI. First, it identified a list of wholesale markets where typically incumbents had significant market power. Second, it explicitly articulated that the purpose of ex ante regulation should be to address wholesale access bottlenecks, and that where ex ante regulation was sufficient to mitigate competition problems at the retail level, then regulation at this level could be withdrawn. In principle, as competition developed at each level of the value chain, it would become possible to withdraw ex ante regulation at that level, focusing it ever more upstream. This approach to regulation was thus intended to enable greater competition over those parts of the supply chain where competition was economically feasible.

However, as less of the supply chain is open to competition under access-based entry compared to infrastructure-based entry, the welfare gains associated with competition are likely to be more limited for access-based entry compared to infrastructure-based entry.

The LoI provided an apparent solution to the dilemma faced by regulators wanting to promote competition while not inhibiting incentives for entrants to invest in their own infrastructures. It proposed that rather than viewing access-based entry and infrastructure-based entry as substitute forms of competition, they should be seen as sequential, complementary steps.

A growing body of literature has attempted to empirically test whether the LoI model of competition applies to WE telecoms markets.⁴ While the LoI has been studied from a number of perspectives, we are not aware of a study which has explicitly considered its application in Central Eastern European (CEE)⁵ countries. This is an important question because there are significant differences between CEE and WE countries which may mean that a LoI may be expected to be relevant for WE but not in CEE.

As CEE states acceded to the European Union in 2004, and later in 2007 (Bulgaria and Romania), they adopted the 2002 telecommunications regulatory framework. However, compared with WE, differences in CEE countries' institutional frameworks, the structure of CEE countries' telecoms markets, and the fact that CEE countries were implementing access based regulation at a later point in time than WE countries may have led to differences in how competition would develop in CEE countries. In particular, the differing legacy telecommunications technologies, economic and demographic circumstances,

¹ Throughout this paper, we use the terms "inter-platform" and "infrastructure-based" competition as equivalents.

² This, for example, has been the approach in Hong Kong. As a large proportion of households are able to choose between two or three different providers that separately operate their own infrastructure, regulated access to the local loop was removed from the incumbent operator. See, for example, Legislative Council Brief, Review of Type II Interconnection Policy, 6 July 2004.

³ See for example Cave (2006): "A corollary of the belief in the advantages of competition is that it should extend across the whole of, or as much as possible of, the value chain. [...] The medium and long-run desirable outcome is, however, competition on level terms among operators of the kind which is already found in mobile markets."

⁴ For simplicity, we use the term "Western European countries" or "WE" for the following EU member states: Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland, Sweden, United Kingdom, Cyprus and Malta. The more accurate term would be "Western, Northern and South European countries".

⁵ We use the term "Central Eastern European countries" for the following EU member states: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia, Bulgaria and Romania.

Download English Version:

<https://daneshyari.com/en/article/559525>

Download Persian Version:

<https://daneshyari.com/article/559525>

[Daneshyari.com](https://daneshyari.com)