Telecommunications Policy 36 (2012) 419–433

Contents lists available at SciVerse ScienceDirect

Telecommunications Policy

URL: www.elsevier.com/locate/telpol

Can evidence of pricing power help market power assessment? Broadband Internet in Ireland and the Netherlands

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ARTICLE INFO

Available online 9 December 2011

Keywords:
Broadband Internet
Pricing power
Hedonic pricing
Market power
Regulation

ABSTRACT

This article proposes a simple hedonic price test to assess whether firms may have pricing power. The test allows NRAs to compare prices of providers of differentiated products on a like-for-like basis. Testing for pricing power could be a useful complement to market share analysis. This is especially the case in market reviews periodically undertaken by European communications regulators. As an illustration the test was applied to broadband Internet access services in Ireland and the Netherlands. Results appear encouraging as they are broadly aligned to the decisions of the regulatory authorities in both countries that the incumbent DSL operators had market power at the time.

1. Introduction

This paper puts forward a simple and practical way in which regulatory authorities could make use of price and service features data for their market power assessments. European National Regulatory Authorities (NRAs) in the communications sector have to undertake market reviews whose aim is to ascertain whether one or more providers have (significant) market power and, if so, impose remedies. NRAs have so far generally made no, or very limited, use of quantitative analysis in market reviews other than market shares. With an aim to improve the use of quantitative analysis, this paper proposes a simple hedonic test making use of price and service features data.

Firms with market power can price above the competitive level. Non-transient market power often provides the rationale for regulatory intervention when it is significant. This paper introduces the concept of pricing power whereby over time a firm is able to price above the price of their competitors for an identical service. While pricing power does not necessarily imply market power, together with other indicators, it could provide an indication that a particular provider has market power. In most markets, providers will have some degree of market power though what is required for regulatory intervention is that its level is substantial. Hence, an indication that a particular provider has some pricing power but other indicators point to limited market power would not be sufficient to justify intervention. However, taken together with other indicators evidence of pricing power could help to assess whether or not a particular provider has market power. Conversely, if a provider is unable to price above its competitors it may be more difficult to conclude that it has market power.

In homogeneous product markets, pricing power is straightforward to detect. This is not so when products are differentiated. Price differences between firms may simply reflect quality differences. To try and separate out the price and

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0308-5961/$ - see front matter
doi:10.1016/j.telpol.2011.11.014

quality differences, this paper proposes a simple hedonic estimation procedure that allows for a price comparison on a like-for-like basis by adjusting for differences in product quality. A firm dummy variable is introduced for the firm(s) that may be the best candidate to have market power. If this turns out to be positive it might indicate that the firm(s) have some degree of pricing power that goes beyond simple differences in product features.

The examples of fixed broadband Internet access services in the Netherlands and Ireland are used to illustrate how the test may work. Broadband Internet services are differentiated along many different features and provide a useful example to test the concept and methodology. The article is organized as follows:

- Section 2 briefly describes the process under which European NRAs assess (significant) market power.
- Section 3 briefly introduces the concepts of market and pricing power, how they are related and their measurement.
- Section 4 describes the test.
- Section 5 applies the test to the market for fixed broadband in the Netherlands and Ireland.
- Section 6 concludes.

2. European communications regulation

In Europe the NRA in each country can impose obligations, including access obligations on communications providers that are found to have market power. The relevant concept is that of Significant Market Power (SMP). In order to do so, they have to follow an established process. The European Commission publishes a relevant market recommendation, which provides a focal point for intervention of NRAs. It sets out the markets where NRAs have to conduct their market analysis to assess whether one or more providers have SMP.[2] In almost all cases only one provider has SMP (single dominance).[3] All the markets currently listed in the recommendation are wholesale markets that would not necessarily exist in the absence of mandatory access obligations. For broadband internet the European Commission has put forward two relevant markets. These are Wholesale Line Access (WLA) where the remedy is often Local Loop Unbundling (LLU) and Wholesale Broadband Access (WBA) where the remedy is often bitstream access—see discussion in Section 5. Although these are defined as wholesale markets, NRAs naturally start their SMP assessment at the retail level. This is the appropriate and logical way to undertake the analysis (see Ofcom, 2010, Section 3). If some providers were found to have SMP at the retail level then there may be a need to impose wholesale remedies such as access obligations.

The legal concept of SMP (or dominance)[4] is central in the NRAs' analysis and is conceptually linked to the economic concept of market power. The European Commission (EC, 2002) has issued guidelines on the criteria for assessing SMP. Focusing on single dominance – that is the case of one or more providers having market power but not tacitly colluding – a central role is assigned to market shares but NRAs have also to consider other criteria such as, but not exclusively, vertical integration, barriers to entry and expansion.[5] NRAs in undertaking SMP assessments in market reviews have almost exclusively relied on market shares as the main quantitative criteria and the other qualitative assessment criteria listed in the European Commission's guidelines.

3. Market and pricing power

Market power is defined as the ability of firms to raise prices above the competitive level. Regulatory intervention may be justified when market power is non-transient and substantial. It is a critical concept in both economic regulation in the communication sector, as discussed in Section 2, and competition policy. In both cases market power and changes in the degree of market power are the main justifications for the very existence of regulatory and competition policies.

There are two instances where the level or degree of market power, rather than the change may be the main focus of attention. The most clear-cut example is that of economic regulation, which is applied to markets where for historical or supply-side reasons (i.e., natural monopoly) it is likely that the main provider has substantial market power. The latter is the main concern, which is often reflected in the imposition of price controls aimed at curbing the incumbent's ability to raise prices. This is the case of economic regulation in European communications markets discussed in Section 2. The second, but less relevant, example is that of abuses of a dominant position under Art. 102 of the EC Treaties. The focus

[2] Although NRAs are free to put forward proposals for regulation in other markets they have to satisfy the European Commission by passing a so-called three criteria test. This requires a demonstration of current and prospective barriers to entry, of the absence of effective competition behind barriers to entry, and that competition law is not capable of dealing with the problem.

[3] The exception, where joint dominance was found, is the market mobile access and call origination. This market, however, is no longer in the current relevant market recommendation.

[4] The legal concept of SMP is equivalent to that of dominance used in European Competition Law, which was defined in *United Brands* v *Commission* (Case 27/76 [1978] ECR207, retrieved from http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:61976J0027:EN:HTML).The European Court of Justice defined dominance as "a position of economic strength affording it the power to behave to an appreciable extent independently of competitors customers and ultimately consumers".

[5] The complete list includes the following criteria: overall size of the undertaking, control of infrastructure not easily duplicated, technological advantages or superiority, absence of or low countervailing buying power, easy or privileged access to capital markets/financial resources, product/services diversification (e.g., bundled products or services), economies of scale, economies of scope, vertical integration, a highly developed distribution and sales network, absence of potential competition and barriers to expansion (EC, 2002).