Discussion of "Testing the Waterbed Effect in Mobile Telephony", by Genakos and Valletti

Francesc Trillas (UAB)

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-"Waterbed effect": reducing the level of termination charges increases the level of retail prices for mobile subscribers.

-This paper is an interesting exercise and shows an impressive knowledge of the mobile industry.

-It provides a theoretical expression for the "waterbed effect" under imperfect and perfect competition, and monopoly and...

-... tests its presence for a sample of 24 countries over six years of quarterly data.

-Example: Under perfect competition:

$$\varepsilon_W = \frac{1 + \varepsilon_I}{-c/\tau + 1 + \varepsilon_N}$$

.

where $1 < \varepsilon_I < 0$ and $\varepsilon_N < 0$ are the elasticity of fixed to mobile calls and the elasticity of mobile subscription, respectively, c is the total cost per customer; and τ is the termination rent per customer. Since $c > \tau$, the denominator is negative and, therefore, $\varepsilon_W < 0$.

-In the imperfect competition and monopoly cases higher termination charges associated to higher profits$\longrightarrow$Regulation Reduces Profits.

Estimation Strategy:

-Equations (5): OLS regressions of ln(prices) and ln(EBITDA) over fixed effects and "regulation," a binary variable that takes value 1 if mobile termination rates are regulated. The binary variable can be replaced by one of two indices measuring the intensity of regulation.

-Equations (6): IV regressions of ln(prices) and ln(EBITDA) over fixed effects and ln(MTR) where MTR are the level of mobile termination rates, instrumented by "regulation".

-Equations (7) and (8): dynamic regulatory effects and combined effect of saturation and competition intensity.

Main results:

-Waterbed effect exists, is statistically significant under a variety of competition intensities.

-Waterbed effect not full: lower termination charges decrease profits.

-Effect is stronger the more intense competition is in mature markets (δ coefficient of triple interaction term).

Strengths of the paper:

-Good data set construction and honest discussion of advantages and disadvantages of the data sources.

-Clear structure and strong motivation.

-Simple empirical strategy.

-Quite convincing in showing that the waterbed effect does exist.

Some questions and suggestions (I):

-Theoretical argument: the analysis of imperfect competition, perfect competition and monopoly should be more homogeneous, to facilitate the comparison.

-When discussing simultaneity bias, two arguments given to justify its absence: first, social welfare maximizing regulators should always regulate termination charges, independently of the level of competiton (but what should happen is irrelevant in empirical terms); second, more convincingly, introduction of regulation is not preceded by higher prices (but the same exercise not done for profits).

Some questions and suggestions (II):

-Discussion of exogeneity of regulation; the authors should list and discuss the possible causes of endogeneity in a more systematic way (compare with Besley/Case and Röller/Duso -mentioned, but not used).

-Is the presence of regulation really a good instrument for the level of termination charges? How sure are the authors that it only affects retail prices through the level of termination charges? Regulatory scrutiny on retail market power may intensify once it is decided to regulate termination charges. Battery of tests and strategies on the suitability of instruments missing (see Murray, 2006).

Final comments

-If regulating MTRs reduces profits, and if incumbents face much higher MTRs, regulators may be using a very narrow instrument to influence (the perception of) market power overall→then regulation not "random"; possible simultaneity bias between profits and "regulation". And too many and too general objectives for just one narrow instrument→possible distortions.

-Very interesting paper, even better than in October 2007, one learns a lot.