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Commentary

Modelling the welfare effects of network neutrality regulation: A response to Caves's comment

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In this issue, [Caves \(2012\)](#) has provided a comment to our paper ([Economides and Tåg, 2012](#)) attempting to take our monopoly model to data. Based on data on content providers' and ISPs' profits in an oligopolistic market in the US, Caves's attempts to draw conclusions on whether the parameter ranges in our model identified as generating a total surplus enhancement from network neutrality are reasonable. While we believe that taking a theoretical model to data is generally a good idea if done right, we must urge caution in drawing policy conclusions based on this effort.

[Economides and Tåg \(2012\)](#) was developed to show as clearly as possible a mechanism through which network neutrality regulation could potentially be warranted based on cross-group externalities. Because of this, the model contains simplifications of reality, especially of demand and cost functions, so as to make it tractable and produce closed form results. It was not intended to be taken directly to the data. Specifically, we assumed very simple demand and cost structures that do not necessarily correspond to actual data. To convincingly go from theory to empirical work, one would need to specify a detailed and much more realistic structural model of the broadband and content markets in a specific region and then attempt to estimate the parameter values of that model (such as, for example, [Crawford and Yurukoglu \(2012\)](#) do for the US multichannel television market).

In economic research, combining theoretical and empirical work is useful for increasing our understanding of the world. But different theoretical models serve different purposes, and it is important to be careful of which predictions to take away from the models. The value and purpose

of our model is that it makes a coherent argument that "two-sidedness" matters and that cross-group externalities should be considered in the network neutrality debate.

We also believe that using accounting profit in [Caves \(2012\)](#) in place of economic profit in [Economides and Tåg \(2012\)](#) is not without dangers that have to be explored in detail. Additionally, all large ISPs are multiproduct firms that are primarily in a different business than the provision of ISP services. Telecommunications companies are primarily focused on non-Internet telecommunications services, while cable TV companies are primarily focused on the provision of video services. Both for telecommunications and cable TV companies, it is hard to accurately separate profits of pure ISP services from the rest of their services both on the demand and on the supply/cost side. The ISPs do not have sufficient incentives to make this separation accurate in their accounting reports. This introduces a new element of uncertainty in the calculations of profits from ISP services as presented by [Caves \(2012\)](#). Similar issues arise for many content and applications providers, and this further clouds the calculation and comparison attempted by [Caves \(2012\)](#).

References

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