



Regulation and Market Concentration

Conference report

Roundtable of the Governance and Regulation Chair

University Paris-Dauphine, 26 May 2016



Table of contents

Thoughts on mobile competition and consolidation	. 3
Promoting competition and investment in communications	. 5
The complex organisation of markets for media services	. 7
Discussion	. <u>c</u>

Regulation and Market Concentration

Roundtable of the Governance and Regulation Chair 26 May 2016

Regulators supervise the behaviour of operators but can also influence the market structure and the economic equilibrium and activities of individual firms. The regulator's actions can affect firms' profits, their ability to invest, and their willingness to serve particular market segments. A tendency towards asymmetric regulation and anti-trust considerations further complicate market design and performance. This roundtable focused on competitive pressures, end-users' interests, and regulatory tools and activities in the mobile and broadcasting sectors.

Thoughts on mobile competition and consolidation

Richard Feasey Associate, Frontier Economics

Understanding past errors

Policymakers and regulators have been slow to appreciate the importance of dynamic efficiencies. The major, transformative gains of the telecommunications industry have been driven by the deployment of new technologies, with changes in market structures and competitive environments playing a far less significant role. For example, it is estimated that around 50% of the 60% fall in unit prices for mobile services in Europe over the last decade is due to dynamic efficiencies enabled by technology, notably increased connectivity between personal devices.

This has been overlooked for two reasons. Firstly, there is a misconception that dynamic efficiencies are driven by mergers, so anti-trust authorities tend to resist claims about dynamic efficiencies in case this is interpreted as a pro-merger position. Dynamic efficiencies are important and should be pursued; mergers do not necessarily produce dynamic efficiencies.

Secondly, the mobile industry has become a commoditised price game and companies have largely lost their ability to differentiate on technology due to standardised products and networks. As a result, market performance and structure are judged primarily on the basis of price and there is a lack of attention to quality, for example in terms of network coverage or customer experience.

As a result, the industry is viewed as a homogenous mass that moves at the same speed on technology and then competes on price. This has been clear with the debate around the 5G spectrum. The industry is incentivised to act *en masse* and there are few incentives for individual firms to obtain advantages over their competitors. Sharpening unilateral incentives will be central to progress and improved performance.

Market structure and performance

The debate around mergers and market structure in the mobile industry tends to focus on the relationship between market structure, expressed as the number of firms, and the simple performance measures of price and investment. Again, investment is mistakenly used as a proxy for dynamic efficiency and quality is not measured. Despite extensive econometric studies into mobile industry structures, there is little useful research that takes account of the importance of the competitive positioning and behaviour of individual firms in oligopolistic markets.

Unilateral incentives affect the rate of technology deployment and can be altered by mergers, particularly for the merging firm. Mergers can have ambiguous consequences in terms of incentives to invest and improve quality. Although a reduction of competition tends to improve returns on investment and make some propositions more attractive, the corresponding reduction in pressure to differentiate reduces the incentive to pursue risky investments.

Mergers that catapult a firm from a weak follower to a clear market leader can, however, produce very positive unilateral incentives to capitalise upon the resulting competitive advantage. Mergers that provide a competitive advantage in terms of radio spectrum ownership can have this effect in mobile markets. More research is required to understand the unilateral incentives and market conditions that would drive firms to improve quality and yield greater dynamic efficiencies. A simple focus on price results in an overly narrow and inadequate conception of the problem.

Implications for policy-makers

First, mergers between high and mid-ranked players might produce better outcomes than mergers between a pair of low-ranked players. Second, mergers must be good for those that take the risks, but need not be good for the non-merging parties: the creation of strong, positive unilateral incentives for the merging firm might have a cost for the rest of the industry. Third, in terms of remedies that anti-trust authorities can apply to protect competition in face of mergers, it is not necessarily sensible to remove assets that could provide strong unilateral incentives for performance. The European Commission has made sound decisions in this respect by not reallocating spectrum following mergers. Finally, regulators must act to strengthen unilateral incentives, for example by not setting spectrum caps too tightly in auctions or by preventing companies from sharing networks. Regulators should pay more attention to these questions.

Promoting competition and investment in communications

Neil Pratt Director of Economic Analysis, Ofcom

The UK market structure

The competitive dynamic between BT and Virgin, the two scale providers for residential broadband network, has had an important role in the UK market. The retail market is unregulated and competitive conditions are vibrant. There are four major fixed retail competitors, two of which rely on access to BT's network on regulated terms. Consumers have extensive choice, there is good price competition, and bundling is well established. There are four national mobile operators plus a number of MVNOs. BT became the first genuinely 'converged' operator in the UK when it acquired EE, a mobile operator, in January 2016. BT is functionally separated, with its access provider activity regulated so as to ensure non-discriminatory service provision.

The network investment challenge: availability and speed

The UK is performing well on broadband availability. Super-fast broadband (SFBB) is well established: 83% of premises have access to speeds in excess of 30Mb/s. Coverage for ultra-fast broadband (UFB) is only around 2%. A public funding programme will extend SFBB to 95% of the population in 2017 with a 10Mb/s Universal Service Obligation (USO) providing coverage for the final 5%.

Further network investment is required to meet growing UFB demand from UK businesses and consumers. There is a growing appetite among providers. A number of projects to improve the performance of existing technology and extend cable networks have been announced and smaller local providers are building brand-new networks in some cities.

Enabling fibre investment through regulation

Ofcom recently completed a major strategic review that considers its approach to regulating communications markets for the next decade. The review sought to establish a regulatory framework system that will promote investment and competition.

Ofcom has sought to harness unilateral incentives to drive investment through network competition, with regulation playing a supportive role. It is aiming to reduce barriers to entry by creating opportunities for BT's rivals to build fibre networks using BT's ducts and poles. Regulation has enabled passive access for a number of years but take-up has been limited by issues of access and cost as well as a general reluctance to invest when consumer demand for SFBB was less clear. Using regulation to further facilitate passive access should encourage new players to enter the market, and may also see BT accelerate its investment in fibre networks.

Fibre investment is subject to economies of density, and this is likely to limit network-based competition to higher-density areas. In areas of where network-based competition is not commercially viable continued wholesale regulation will be needed to allow providers to compete based on access to BT's network. The development of network-based competition may provide scope for deregulation in the longer term. This will be considered in future market reviews.

Using price regulation to incentive investment

The use of regulation to incentivise investment is an interesting feature of Ofcom's approach. Ofcom uses cost-based charge controls when regulating established technology for which demand is fairly certain, such as BT's copper network. Ofcom has promoted investment in fibre networks through the application of a 'fair bet' principle to provide investors with the expectation of returns that reward the risks taken. BT as the SMP operator is currently required to offer wholesale access to its SFBB fibre service, but is not subject to a price control on this service (referred to as 'pricing flexibility'). Competition from Virgin and existing regulated copper-based products acts as an effective competitive pricing constraint on BT. In addition, a margin squeeze condition obliges BT to maintain an adequate margin between its SFBB retail prices and the wholesale charge for SFBB in order to maintain retail competition.

Next steps

Ofcom must decide whether to maintain pricing flexibility on new fibre. It must also decide the point at which pricing flexibility on BT's investments in SFBB should come to an end, and whether it is appropriate to move towards cost-based regulation. The 2017 wholesale local access market review will consider these issues and translate some of the principles set out in Ofcom's strategic review into concrete regulatory policies.

The complex organisation of markets for media services

Nicolas Curien Member of the Board, Conseil Supérieur de l'Audiovisuel

The European landscape for the regulation of media services is young and relatively diverse. Several European regulators, like the French CSA, are modelled as independent administrative bodies while some countries still practice a regulatory approach that is imperfectly independent.

CSA, the French regulator

The CSA has at this stage moderate powers to regulate the economic structure of the audiovisual sector. Prior to 2013, it was limited to allocating frequencies to radio and television channels, the regulatory rules then deriving as a counterpart for the gratuity of this allocation. In 2013, the 1986 French law on the freedom of media communications gave the regulator more economic power and enabled it to influence the structure of the market.

The CSA exercised this power at the end of 2015 when it granted the LCI news channel permission to shift from a paid model to a free business model funded by advertising. Permission had initially been refused in 2013 due to the perceived weakness of the television advertising sector, where 25 companies were already competing for advertising revenue, and because a third news free channel was not deemed necessary. In 2015, the CSA's hand was guided in the opposed direction as the main distributors of paid television announced that they would stop distributing LCI and the channel's survival became dependent on a change to its business model. In those two successive decisions a subtle balance had to be found between promoting consumers' welfare and avoiding the risk of a potentially harmful competition

The importance of global market architecture

The audiovisual regulation framework also influences the upstream content production sector. The 1986 media law includes obligations for television channels to finance content production, specifically French and European content. This regulatory approach favours independent content providers that have no capitalistic nor long-term or privileged relationship with a particular distributor. It increases the granularity of the upstream market by enabling the viability of many small producers that could maybe not find a feasible business plan otherwise.

The importance of market structure in complex industries

Market structure must be considered alongside market concentration. For example, the audiovisual market is composed of upstream, mid-stream and downstream segments that generate, purchase and distribute content. Each level has a specific horizontal market structure, but the degree of vertical integration between these different levels is also important.

'Convergence' in the audiovisual market must be understood in two dimensions, respectively horizontal and vertical.

A horizontal "intra-pipe" convergence occurs because infrastructures increasingly share a common core that will, ultimately, result in an integrated global pipe that allocates content optimally in real time. In parallel, another horizontal convergence is occurring, "intra-content": it is an outcome of the rise in user-generated content, which is gradually reducing the gaps that exist between low-cost homemade output and professional content.

A vertical "pipes/content" convergence is also observed in the industry but whereas there are economic and technological underlying reasons for intra-pipe and intracontent horizontal convergence, there are no similar strong underlying drivers for convergence to occur between pipes and content. Rather, it appears that pipe/content convergence is more opportunistic in nature: it is the result of financial and industrial strategies as firms try to capitalise on the value that pools downstream and bring it upstream to where the costs occur.

The importance of dynamism and flexibility

The co-existence of different processes for content delivery mean the audiovisual environment is very dynamic and incompatible with static regulatory frameworks. Taking account of this very fluid context and being sufficiently flexible to accommodate and manage these dynamic transitions is a significant challenge for media regulators

[A longer version of this contribution is available on our website http://chairgovreg.fondation-dauphine.fr/nicolas-curien]

Discussion

Do you think that pipe convergence is a technical and economic necessity?

Richard Feasey

On the supply side, there are strong drivers for traditionally wireless companies to own substantial fixed fibre assets and for fixed infrastructure to incorporate more wireless. Technology is enabling much better wireless performance, volumes are increasing, and home environments are increasingly wireless.

It is less clear on the demand side. The relationships for fixed and wireless services tend to be different and bundling offers relatively few efficiencies. At the same time, there is a tendency for people to abandon their fixed communications and retain wireless only. Fixed connections are no longer necessary.

Neil Pratt

Mobile and fixed networks are increasingly complementary on the supply side. The fixed network is building further into areas of high demand. On the demand side, consumers care about seamless connectivity but not about infrastructure. This may be why BT acquired EE.

Nicolas Curien

Michel Combe, CEO of SFR, describes 5G as "the fibre in your pocket".

Neil Pratt

This perspective is helpful for understanding efficiencies and resource use at a macro level. The costs of spectrum resources and building fixed assets need to be combined in a meaningful way.

The radio spectrum is the lifeblood of the mobile economy. In France, spectrum has traditionally been shared equally among operators. Ofcom takes a more flexible approach, with UK operators allowed to invest to gain more coverage or expand capacity. What are your thoughts?

Neil Pratt

The UK's 4G auction was designed to preserve a four-network market structure and prevent the auction being used as a back-route to consolidation. Ofcom felt that this should occur through mergers rather than informally through spectrum auctions. Nevertheless, the UK is quite asymmetric.

Joëlle Toledano

The French authorities view the spectrum primarily as a way to raise money rather than as a means to differentiate the market. In the US, the spectrum drives competition and differentiates

players on quality.

Nicolas Curien

A well-designed auctioning process should result in an efficient allocation of spectrum. Players that do not obtain *ex ante* sufficient spectrum to operate should benefit *ex post* from regulated mechanisms of access.

Eric Brousseau

The UK and France seems to have different approaches to (dynamic) efficiency. The French have a vision of static competition on pre-defined markets, while the UK thinks in terms of dynamic competition and expects players to manage assets and invent new business models. The LCI case shows that the CSA decided what business model a specific firm should be allowed to adopt.

Joëlle Toledano

This is a theoretical vision. In reality, France is the only country where a new business model based on equality has appeared.

Richard Feasey

In my experience, the worst outcome for a commoditised, undifferentiated world like mobile is to have a small number of players with equal shares because the greatest danger in this type of market is tacitly collusive, coordinated behaviour. The oligopolistic nature of the mobile market tends towards stable equilibrium; differences and gaps between firms are essential to guard against this outcome. There is a need for more research on these questions.

Neil Pratt

Equalising and homogenising firms is not a desirable outcome. Ofcom's position is based on the idea that mobile firms must have adequate assets and capabilities to be competitive. They do not need to be identical.

Issues with econometrics studies were highlighted. I believe that it important for economists to work differently and to understand sociology and organisation as well. Are regulators, which tend to be staffed by economists and lawyers, well placed to decide whether a merger is good or bad? Would entrepreneurs and the market be better placed to decide?

Richard Feasey

I would not be quite so pessimistic. Although more work could be done on quality and the relationships between competitive dynamics and market outcomes, economists provide useful thinking on market performance. The European Commission could take a more active approach to understanding the rationale behind the transactions and plans of merging parties. However, one does not need to be an entrepreneur to do this. It will be difficult to adopt this approach, but I believe that we must start and that the potential gains are significant.



