Mobile competition in the 5G era

Can too much of a good thing leave us wanting less?

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PolicyTracker

Spectrum news, research and training

Good for consumers, bad for business?

The long-running battle to merge Sprint and T-Mobile, the third and fourth largest mobile operators in the USA, is a good illustration of dilemma at the heart of competition policy. The two companies argued that reducing their costs would allow them to take on the market's two biggest players, AT&T and Verizon, more effectively.

"How sustainable is it to have 4-5 companies each with their own network trying to grab consumers?"

The legal authorities in 13 states did not agree, arguing that the merger would lead to reduced competition and higher bills. They brought a legal challenge which was rejected in February 2020

This is a familiar theme. Telecoms firms want to merge so they can be more efficient and invest more in their networks, but policy-makers worry that mergers will lead to higher prices for consumers.

Mobile operators do believe competition is a good thing, but too much of it seems to leave them wanting less. In France, Orange's chief executive recently told investors that consolidation among the country's four mobile networks was essential after years of price wars. Orange, the largest French telecoms group, would consider buying assets to help its rivals SFR, Bouygues or Iliad to merge, he said.

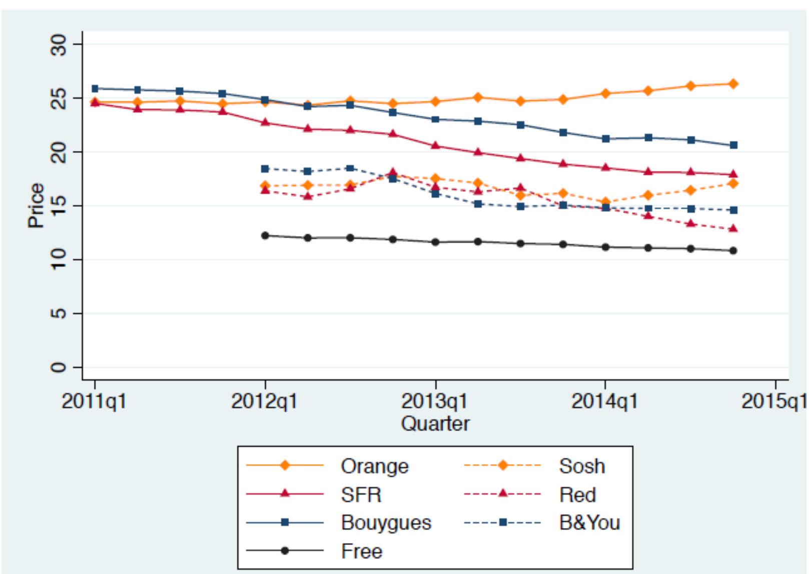

Figure 1: In France, consumer prices decreased after the arrival of new entrant, Free. (Source [Bourreau, Sun & Verboven](#) 2018)

Rampant competition may give consumers cheap prices, but it can leave telecoms companies seriously weakened. In India, established operator Bharti Airtel has written to the country's competition commission to complain about the 'predatory free pricing strategy' of new market entrant Reliance Jio. The firm launched its service by offering free voice and data and signed up over 70 million users in the first six months. This meant its rivals had to slash their prices too.

‘European companies often seek to justify their mergers by saying they need to find efficiencies and synergies,’ says Tom Kiedrowski of the Cedar Tree Advisory Service. Tom will be leading *PolicyTracker*’s ‘Regulating Competition in Mobile Markets’ training course in June.

‘They say they need to operate on a larger scale in order to compete with huge US competitors. Regulators may sympathise, but they want to know what this means for consumers. Mergers usually lead to prices going up, and then people start demanding to know why the deal was allowed to happen.’

Should competing networks be a priority in the 5G era?

Some analysts argue that there is a fundamental conflict between two policy objectives—one is ubiquitous 5G for a competitive economy and the other is a wish among competition regulators to maintain four-player markets.

Mobile industry association the GSMA has argued that government interventions to address problems in competitive markets are being undermined by ‘regulatory policies designed for a bygone era’.

For the next generation of mobile, does it really make sense to build multiple competing networks? That requires a lot of investment that eventually has to be recouped, Kiedrowski says. ‘How sustainable is it to have 4-5 companies each with their own network trying to grab consumers? Some operators will do well but others may end up going out of business. Mergers have to be allowed at some point.’

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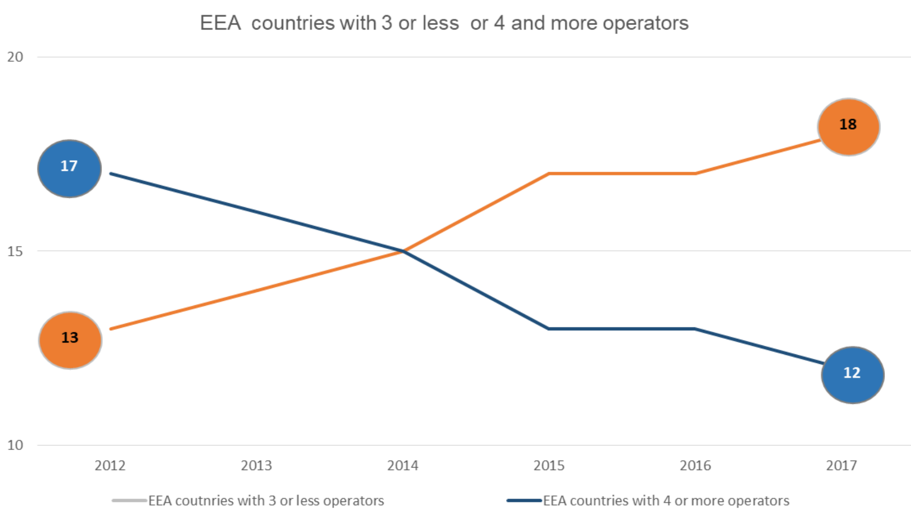

Figure 2: In Europe, the number of operators per market is declining (Source BIPT/Cullen)

Francesco Nonno, director of regulatory affairs at Italian fibre provider Open Fiber, complained that Italy's 5G auction in 2018 was not well suited to the requirements of the new technology. 'The ministry just reproduced the structure that aims at competition among mobile operators to provide mobile broadband,' he said. 'Carriers have paid a lot of money just for the opportunity to continue offering a mobile broadband service, but at the expense of coverage.'

Network sharing has become an increasingly important part of the mobile equation

In Mexico, regulators have taken a very different approach. They were worried there wasn't enough competition in the mobile market and that this would delay the advent of 4G. The government decided to create a separate wholesale mobile company and gave it exclusive access to a 90 MHz block of spectrum in the 700 MHz band.

Competition is about providing the best service, not only about auctions, says Gérard Pogorel, a professor at Telecom ParisTech. He believes that among regulators, the 'mood is changing' and more of them are prepared to embrace dynamic approaches to frequency assignments. Spectrum should be assigned to providers who promise better services, rather than those who pay the most, he says. Operators who invest more resources should pay lower fees.

One example is France, where the government replaced upfront fees for licence renewals in the 900, 1800 and 2100 MHz bands with specific guaranteed coverage obligations. Operators have to deploy 5,000 new 4G sites across the country, but they could be shared.

How else can operators reduce their costs?

Network sharing has become an increasingly important part of the mobile equation. 'In a small market it can be very difficult to support 4-5 operators,' says independent spectrum consultant Roberto Ercole, who is the other trainer delivering the *PolicyTracker* course.

'In the UK, each operator has about 15,000 cell sites. If you can cut that it in half, that's a lot of money saved. There might be more of a case for duplicating infrastructure in urban areas where there are more users. And some users generate much more revenue than others.'

Competition law shouldn't impose obstacles on people seeking to roll out 5G, adds Kiedrowski. 'It should allow network sharing to take place. There's a step change to 5G, so the scale of it lends itself more to network sharing than 3G or 4G did.'

Sharing can take many forms. There is passive sharing, which amounts to the sharing of towers, power, cabinets at the bottom of mobile masts, air-conditioning and so on. One step up from that is active sharing, where all equipment at a mobile installation is shared, including the electronics, but each operator still transmits over their own frequencies.

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Then finally, there is spectrum sharing or pooling, at which point separate operators can become indistinguishable. Telenor and Tele2 took this route in Sweden when they formed the Net4Mobility joint venture to bid for spectrum jointly. Telia and Telenor also teamed up in Denmark to make joint use of 800 MHz spectrum.

The European Electronic Communications Code, may have a big part to play. It sets out rights and obligations regarding the installation and maintenance of mobile phone masts and other telecoms infrastructure along with rules on the co-location or sharing of ‘network elements and facilities’ and the deployment of spectrum. EU member states can expand on these rules with their own legislation.

The Code also provides for regulatory intervention in telecoms markets where companies have significant market power, and will force some telecoms operators to consult with regulators before updating legacy infrastructure.

Find out more about the twists and turns of mobile regulation and what they mean for your business at our ‘Regulating Competition in Mobile Markets’ training course. Register here or download the brochure here.
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