Impact of number of mobile operators on investments

Whether more consolidated mobile markets would lead to higher network investment and consumer welfare is currently the subject of a public controversy. This debate relates to an old question: does more competitors always deliver better market outcome, or is there a threshold beyond which investment is discouraged, hence impacting public interest? In other words, can investments happen without a minimum level of profit margin in innovation and capital-intensive industries like mobile?

A report from OCDE in 2014 had hinted that more mobile operators implied more competition and innovation for the benefits of consumers. This theory had added that four actors in national mobile market was a minimum number to deliver high innovation and low prices: this theory was supported by the fact that four is the number that has been preferred by European regulators over the last decade.

The latest WIK (2015) report for OFCOM rejects the existence of any link between competition level and investment, as it highlights the absence of any significant linear relationship between capital expenditures and competition in mobile markets, based on recorded evidence in 12 countries from 2005 to 2013. Besides, the WIK case studies do not evidence that 4-to-3 consolidations would improve overall market performance. The analysis concludes that investment follows a cycle and that current investments by mobile operators are determined by their investments over previous periods.

Works of Frontier (2015) had not evidenced any detrimental effects of mergers on consumer welfare in European markets over 2000-2014. First, investment per subscriber is not higher in markets with four operators than in markets with three, and prices are not lower. Furthermore, Frontiers presents the rationale by which mergers may increase operators’ incentives and abilities to invest. As investment is the main source of improvement of consumer benefits by driving down unit prices, Frontiers concludes that authorities in charge of mergers in the mobile industry should be prejudiced against markets with 3 operators.

Several recent empirical analyses have shown that the relationship between competitive intensity and market outcome in the mobile industry is a trade-off balancing static competitive intensity (i.e. which reduces the profit margins of players), with static efficiencies (provided by better economies of scale achieved by larger players) and dynamic efficiencies (more profitability feeds more investment in more efficient technologies). In this light, competent authorities should carefully evaluate this balance in their assessment methods, before they encourage market entry or block consolidations.

A recent study from Genakos et al. (2015) on 33 OECD countries over 2002-2014 concludes that 4-3 mobile mergers led to increases in prices but to more operators’ investments as well. Typical asymmetric mergers between smaller operators would lead to increase in prices per operator by 4%-7% and in investment per operator by 7%-14%. As investment is the condition of future price decrease, the policy choice consists in balancing these effects.

Other works analyse the linkages between competition intensity, and capital expenditures. Houngbonon & Jeanjean (2015) had evidenced an inverted U-shape relationship between competition intensity and investment in an international panel of mobile markets including a total of 110 mobile operators, for a 2005 to 2012 period. Their estimates show that there exists a level of competition intensity that maximises the investment of mobile operators and that this level depends on the way investment is measured. When investment is measured per operator, the optimal level of competition intensity stands at 60%, namely, for an EBITDA margin of 40% of their total revenue. When this level is measured per subscriber, it amounts to 63%, which corresponds to an EBITDA margin of 37% of their total revenue. Above these thresholds, any further increase in competition intensity driving a decline in the margin rate will undermine investment either per operator or per subscriber. The public policies driving EBITDA margins below this ratio will reduce investment. Moreover, their calculus shows that the long run effect of competition on investment is significant and 3 to 4 times larger than the short run effect, which implies that policy choices setting the level of competition intensity can have long lasting effects.
A same conclusion on the competition intensity and investment trade-off was independently reproduced in the HSBC (2015) study on 66 countries observed from 2003 to 2013. Because European mobile markets are below this optimal threshold, the study recommends to restore adequate profitability levels to fuel investment.

Houngbonon (2015) investigates the impact of a recent change in mobile market structures in France and Austria shows that the entry of a fourth operator in France raised unit prices of mobile data services and decreased the unit price of voice services. In Austria, the 4-to-3 merger lowered the unit price of data service and increased those of voice services.

Finally, a recent study from the IDATE (2015) on the EU-5, namely, the five largest European countries (Germany, Spain, France, Italy and the UK), underlines that Europe is lagging behind the world leaders of the mobile industry, namely South Korea, Japan and the US in terms of LTE deployment and adoption, as well as in terms of the development of mobile data usage. The EU-5 is the only region where the mobile revenues are declining. The IDATE argues that this trend is due to European policy decisions that aim at cutting spending in the short-run, at the expense of investment in innovation. With declining revenues and low profits expectations, European mobile operators, which are supporting the same rate of investment on revenues as their counterparts in leading regions, have nevertheless lower levels of investment due to their lower revenues. As a result, the deployment of high-speed mobile broadband technologies is slower in Europe, as is the unit cost, and thus the unit price of data mobile services is higher in Europe, which slows down the adoption of up-to-date services. In the end, this situation is detrimental to both European consumers and the competitiveness of European companies. The IDATE recommends to put investment at the core of European policy, notably by restoring revenues prospects for the mobile industry investors.

These recent empirical research results challenge the conventional assumption that more competitors would always generate more investment. The interest of academics in this subject is welcome as it can provide to competitive authorities tools to genuinely address the question of the impact of mergers on investments without relying on presumptions or on oversimplified reasoning. In the specific case of European mobile markets, one should retain the consensus on the fact that the decrease in mobile services’ unit price essentially result from investments and that 4-to-3 mergers may unlock investment.

---

1 “Mobile operators’ investments Europe needs a pro-investment mobile regulatory framework”, Whitepaper based on IDATE study for Ericsson and Qualcomm, November 2015.