China Unicom restructuring paves the way for industrial co-investment in 5G

August 2017

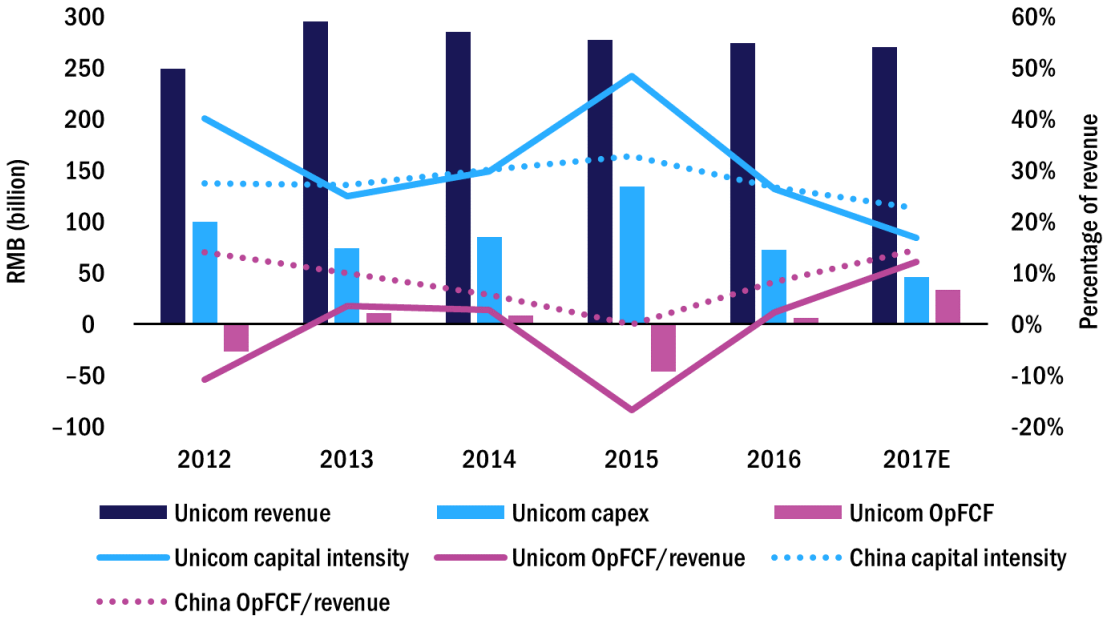
Rupert Wood

Operator investment in 5G seems on the one hand inevitable, and on the other hand very risky. Operators know that not investing, or being cautious, could be sending out the wrong signals, yet privately few see a clear positive case for 5G. Even for an integrated operator, we estimate that 5G will add at least 3 percentage points to capital intensity for several years, and for a mobile-centric operator a lot more. In August 2017, a consortium of Internet and industrial entities took a combined 35.2% equity stake in China Unicom. This comment argues that the logic of this restructuring helps spread the risk of 5G investment onto the network's potential beneficiaries, and that what may seem like a China-specific reform of a state-owned enterprise is, in fact, a sign of things to come in the rest of the world.

China Unicom has announced a 'mixed ownership' reform

China Unicom is the third-largest operator in China in terms of revenue. It is losing mobile market share, and China Mobile has recently overtaken it in fixed. These two operators and China Telecom are cutting their enormous capex budgets as FTTP and 4G roll-out come to an end, but none as much as China Unicom, which has slashed its 2017 budget to RMB45 billion (USD6.75 billion), a third of what it was in 2015. Without further investment from outside, it cannot sustain anything like the same level of capital intensity as its peers – and this with 5G on the horizon (see Figure 1).

Figure 1: China Unicom high-level financial metrics, capital intensity and operating free cash flow (OpFCF) for three main operators, 2012–2017, China [Source: Analysys Mason, 2017]



China Unicom is a state-owned enterprise. In August 2017, it announced a 'mixed-ownership reform', in which a consortium of 14 privately-owned businesses and funds would take a 35.2% stake for RMB78 billion (USD12 billion). The consortium includes:

- large Internet/ecommerce companies: Alibaba, Baidu, JD, Suning and Tencent
- companies from other verticals: ride-hailing business Didi Chuxing, datacentre provider Wangsu Science & Technology, railway stock manufacturer CRRC, business software provider Yonyou, network services business Guangdong Eastone Century and technology conglomerate Kuang-Chi
- financial institution China Life Insurance and two other specialised funds.

The Chinese government wants more private investment in state-owned enterprises to create more 'vibrant' market-oriented businesses. It might be tempting to say that that is all this restructuring is: an attempt to row back from the highly supply-driven model of state enterprises to allow a more demand-driven model to flourish.

Most of the Internet giants already have MVNOs, mainly on Unicom, and further ownership would strengthen existing MVNO models: basically cross-subsidy of telecoms for ecommerce purposes and big data harvesting. However, Unicom suggests that this expansion of influence of ICT players will extend to investment in the physical networks. According to Unicom, the proceeds raised by the new equity would allow it "to enhance 4G capability, conduct 5G technical network trials and related business functions, build pre-commercial trial networks, and invest in innovative businesses".[1]

Towards a less risky consortium model for 5G

Consumer 5G mobile connectivity alone promises little if anything in the way of additional revenue, certainly nothing like enough to cover the investment required in deployment. This is particularly true in a country like China, with very high FTTP availability and take-up, and where consequently the 5G fixed–wireless opportunity will be small. Building a network and waiting for new vertical-based B2B or B2B2X players to come along is a high-risk strategy.

Without actual investment in the **physical** 5G network by potential sub-nets, it is difficult not to be sceptical about the subnet/network-slicing narrative. Of course, all manner of verticals will express an interest in the capabilities of 5G, and most will say it is important; they have nothing to lose. Hitherto, though, we have seen no examples of co-investment or co-ownership.

A healthier model in terms of balance of risk would be one that is similar to submarine cable consortia, or even the more recent FTTP consortia that have emerged. In the 5G case, though, the co-investors are not downstream operators, but downstream service providers essentially from outside the telecoms industry. It would give these co-investors a real ability to shape the future mobile network, to use it to their own ends. This would confer upon 5G a stamp of confidence.

This simply shortens the supply-chain: service providers sell to end users. In the long term, it might totally disintermediate the mobile operator, but that is further ahead. Bubbles (or crises of overproduction) happen where the ability to produce ever more and ever more efficiently loses sight of end-users' willingness or ability to pay, and therefore supply-chains become over-extended and business models over-elaborate. The telecoms crash of 2001 was a prime example from within the telecoms industry, and the 2008 banking crisis had the same basic characteristics.

1 See www.chinaunicom.com.hk/en/ir/presentations/pre170816.pdf.

If 5G is economically beneficial to industrial and OTT players, then they should logically start to invest in the physical network: we should see, globally, more non-telecoms organisations co-investing in mobile, and perhaps a slew of M&A transactions involving (distressed) mobile operators. If it does not happen, then we should be more sceptical about the real value of 5G (its capacity or its service agility) to industrial verticals.

Analysys Mason Research covers the emerging 5G landscape from different angles: our *Network Investment Strategies* programme focuses on optimising the network investment case; and our *Next-Generation Wireless Networks* programme focuses on the development of 5G technologies.