THE ROLE OF TELECOMS IN THE ECONOMIC RECOVERY

Catalysing private investment is key to improved connectivity

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THE INVESTMENT CHALLENGE

Estimates of the investment needed to meet the ambitious EU digital compass targets have been upwards of Euro150bn. These connectivity targets have been set on the basis that most of this investment will be funded by private investors. The role of government is to nurture an environment favourable to that investment, supplemented with some public spending to improve connectivity in rural areas which are fundamentally unprofitable.

The critical question, then, is whether there is a business case for making the investment the government deems vital for the economy. A number of factors suggest that private investors' incentives may not be fully in lockstep with policymakers' desire for a fast roll-out to spur economic growth. There is a range of reasons for this potential misalignment:

- The roll-out of new networks will require significantly more capital expenditure than in the past, but there is limited evidence of strong demand for the new use cases that the investment will make possible;
- Even if there is increased customer willingness to pay for novel use cases, it is not clear that the operators that invest in improved connectivity will be able to extract sufficient value, given the presence of other strong players in the value chain and
- Investors may fear that if they can extract enough reward to justify the risks associated with investment in new networks, the government may set future regulatory or competition policy in a way which may remove some of this reward.

Past experience on the convergence of policymakers' and private investors' interests has been mixed:

EXEC SUMMARY

In the last two years the internet bandwidth provided by telecoms industry proved its worth by bolstering the resilience of society and the economy in the face of the pandemic. While Covid is still with us, the industry's focus in 2022 will turn again to connectivity improvements to serve the use cases of the next decades.

Policymakers have recognised the need for much better connectivity. The European Union, for example, has set out targets and provided funding for the roll-out of Very High Capacity Networks (VHCN) – principally 5G mobile networks and fibre-to-the-premises (FTTP) fixed networks. The enthusiasm for enhanced technology reflects a view that, while current networks have demonstrated the value of existing applications such as video-conferencing, novel use cases vital for future productivity growth will require improved connectivity across the board, including higher speeds and increased reliability.

Policymakers and network operators need to work to ensure that conditions are as conducive as possible to investment and that networks deliver for consumers and the economy as a whole.

- To date new mobile technology has been rolled out rapidly once it has become available, as strong growth in data usage has required network operators to invest in order to remain competitive by minimising unit costs;

- Where there has been a degree of competition in fixed networks, for example between incumbent telcos and cable television companies, this has led to network enhancements, albeit in many cases incremental improvements to existing networks rather than a full upgrade to the latest technologies; and

- For fixed networks where there is a limited competitive constraint, where there is risk attached to rolling out fibre networks, due to uncertainty about people's willingness to pay for new services, management has tended to shy away from replacing existing assets with new assets offering uncertain returns.

This potential misalignment between policymakers' objectives and investors' incentives has been recognised to a degree, with the EU explicitly adding a requirement to its updated regulatory framework (the 'Code') to incentivise the roll-out of VHCN. The Code was passed in 2018 and was due to be transposed into national law across the EU by 2020, but Covid has delayed implementation. Most jurisdictions in the EU have still not finished revising rules to reflect this new framework.

INVESTORS IN FIXED NETWORKS REQUIRE CERTAINTY

In fixed markets, policymakers have typically taken a three-step approach:

- Encouraging infrastructure based entry where feasible, and relying on competition by existing and new players to drive investment;
- Providing stronger regulatory incentives to roll out VHCN where competition is less/not feasible, i.e. in areas where deployment costs are too high to support more than one operator; and
- Publicly subsidising roll-out in areas shunned by private investors.

The first challenge is to determine the right mixture in each country? . Some jurisdictions such as Singapore have used a public-private partnership model, with significant government support, to achieve rapid, widespread roll-out. However, likely government spending constraints post-Covid mean most countries are likely to want to minimise subsidies. This means setting up regulation for both competitive and monopoly areas in a way which gives private investors, both incumbent operators and potential new entrants, greater certainty about expected returns.

One barrier to creating this certainty is that fibre assets last decades while the regulatory framework has a much shorter-term focus. For example, the EC Code requires regulation to be revised every five years (up from three years previously). For investors, even if the current regulatory regime looks more appetising there is always a danger that rules could be applied in the future in ways that threaten long-term profitability, chiefly:

- Being fully exposed to downside risks associated with limited willingness to pay whilst facing competition between infrastructure-based operators; and

- A risk that any returns above the cost of capital will be interpreted as being the result of market failure and hence regulated away.

There are a number of ways that regulators could give greater certainty to investors, for example by:

- Issuing forward guidance on the regulatory approach over the longer term to minimise any actual or perceived risk of clawing back legitimate rewards/returns;
- Encouraging longer-term contracts, such as co-investment agreements between parties, in order to provide visibility to investors on long-run pricing; and
- Setting out the approach for determining how future fibre investments will be included in a regulatory asset base if regulation proves to be necessary. Such a commitment would reassure investors that the regulatory policy would allow them to earn an appropriate return on their capital even if the regulators change.

An important question for regulators will be how to incentivise VHCN investment and continue to sustain retail competition as consumers transition to VHCN.

COMPETITION IN MOBILE MARKETS PIVOTS TO QUALITY

Compared to generally tightly regulated fixed markets, mobile markets have generated huge benefits to customers, who now enjoy many more services and lower prices thanks to competition. The role of policymakers has been largely confined to setting the parameters of competition by issuing spectrum licences and overseeing merger controls to determine the number of operators.

For mobile services, 5G is expected to usher in significant changes, with a sharper focus on network quality and technological innovation rather than the 'best effort' approach to quality that characterises the current mobile broadband market. This may lead to service quality displacing price as the main driver of competition for an increasing number of residential and business customers, and use cases. Under such a shift, it is not clear that market structures that have delivered to date, will necessarily catalyse the 5G investment that policymakers are targeting.

Price-driven competition between network operators is effective in incentivising capital spending which reduces unit costs or is required to meet expected service quality in the short term. However, it can deter more risky investment in the quality required for innovative services. That is because operators may consider that any profits to be had from service differentiation will be quickly competed away by rivals that start to invest once demand becomes more certain.

The returns for network operators may also be squeezed by other players in the value chain, further disincentivising investments in 5G. The rapid take-up of smartphones and 4G generated far more value for the complementary device manufacturers and app providers/stores than for the network operators, judging by their respective market capitalisation. At the other end of the value chain, key suppliers including network equipment manufacturers, towercos[1] and governments as providers of spectrum may

[1] created by mobile network operators tapping the demand for assets delivering steady cash flows by separating and selling their infrastructure assets

seek to capture a share of the value created by innovative 5G services. While in theory companies across the value chain could co-operate to deliver an optimal level of investment, the combination of uncertainty of which use cases will be successful and the asymmetric negotiating positions of potential partners may lead to network operators deferring risky investments.

The challenge for mobile network operators that wish to use 5G to increase returns on investment, and for policymakers who are relying on them to roll out high-quality 5G networks, is to create new business models which allow operators to tap into network quality and innovation as a source of value.

For operators this may mean moving away from a focus on cost minimisation in a commoditised market to differentiating themselves from their competitors, for example by emphasising key use cases for 5G. For policymakers this may mean accepting that interventions aimed at heightening short-term price competition may not be optimal in the long term if the result is a market in which operators put the stress on honing competitiveness by cutting costs rather than by raising quality.

CONCLUSION

In 2022 policymakers and telecoms operators will seek to capitalise on the undoubted success of the telecommunications sector in supporting the economy during the pandemic by making it easier to work from home, entertain ourselves at home and keep in touch with distanced friends and family. The hope is that even better connectivity will allow economies to grow more rapidly when bouncing back from Covid-19.

However, rolling out improved technology depends crucially on a significant 'wave' of private investment in fixed and mobile networks. Private investors have exhibited a greater appetite for investments in infrastructure that have assured cash flows. But this alone will not guarantee the required level of investment spending. If investment falls short, at best the upshot could be a continued digital divide within countries and a slower recovery from Covid as poor connectivity holds back the economy; at worst the outcome could be a longer term innovation and productivity hysteresis affecting longer term potential growth.

To hit the stretch targets for the roll-out of new technologies, policymakers need to consider what changes are needed to ensure their objectives are aligned with investors' incentives. For fixed networks this will require more certainty on the long-term approach to regulation. For mobile networks accepting that a focus on short-run price competition may not be compatible with long-term investments in quality.

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