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'Competition and investment: the history of telecoms regulation in 4½ chapters'

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The views expressed belong to the speaker alone

1. Nationalisation

The telco as a part of government - ‘the Post Office’

An unquestioned monopoly (‘any colour, so long as it’s black’)

Tariffs and investments, surpluses and deficits, are linked public expenditure decisions,

A Universal Service aspiration, finally achieved, and supported by service cross subsidies.

2. Privatisation, the duopoly period (’84-’91) and after

- Limited competition based on two-way interconnection
- Extensive development of analogue cable networks
- Continuing digitilisastion of the upper levels of the (nearly wholly voice) network
- End to end price control of BT using nascent ‘building blocks’ method
- Investment ‘authorised’ by Oftel, but subject to incentive regulation
- Network planning a BT preserve.

3. Unbundling and deregulation of the copper network

- Access-based competition initially resisted by Oftel in favour of cable competition
- Unbundling of the (copper) loop - ULL - starts in Germany etc about 2000; delayed in UK (see separation below)
- Because loop is sunk (and inherited from pre-privatisation days), regulators have wide discretion over pricing
- Unbundling model enshrined in mandatory 2003 European Directives for ECS

Form and effects of copper unbundling

- Pricing of access products designed to promote competitors' roll-out of infrastructure as close as possible to customer premises (' the ladder of investment')
- Did unbundling increase investment? Yes for entrants, no for incumbents, and no overall. (Krajek & Roller, 2009), yes for entrants, no for incumbents, and no
- Did it improve broadband penetration? Evidence suggests: i) service competition alone had zero or negative effect; ii) LLU had fairly small positive effect; iii) end to end competition brings much greater benefits (Bouckaert et al. 2010, Valletti & Verboven (2012).
- But is end to end in uncabled areas a feasible policy goal, in the fibre age?

A digression: separation

- Flexible boundary between monopoly and competition makes ownership separation hazardous
- Evidence of efficiency benefits of integration (surveys by Joskow 2010, Lafontaine/Slade 2007, etc.)
- But functional separation tried in UK in response to BT non-price discrimination
- This separates operations, but not investment – possibly for (fibre) hold-up reasons
- Renewed (Dec. 2012) recent interest in tougher non-discrimination, not separation, rules at the C'ion, linked to more flexible fibre pricing

4. Fibre

- Precursor fibre investments in Asia heavily directed and funded by state
- Private fibre investment has occurred in cabled areas – Netherlands/Sweden/USA - to some degree/UK – latterly
- Public investment a major factor – in Europe; more extremely in Australia, where full remonopolisation and nationalisation are in train.

Conditions for investment 1: the price of copper

- (Outside E Europe) fibre networks compete with (co-owned) copper networks. How should copper ULL be priced? A low rate limits retail prices and hence returns to fibre; a high price makes copper too profitable for the incumbent
- Can the price of copper be both low and high? Yes, with a tax, proposed in the UK but not implemented
- The outcome of this heated debate has been to to keep the price of copper the same.

Conditions for investment 2: the access regime

- Relaxing the regime increases return to incumbent’s fibre investment
- Can be accomplished by an access holiday, or more flexible pricing rules (than for copper ULL)
- Both have been used by NRAs
- More flexible pricing rules recently endorsed by the C’ion, if accompanied by full equivalence of inputs (separation not needed).

Conditions of investment 3: public funding

- For the first time in decades, fixed networks have become a sink for rather than a source of public funding
- Australia aside, contract law has been the means for subsidising fibre local loops, via PPPs
- State aid rules relating to displacement of private investment have been relaxed, but they still require competitive tendering and open access; this leads to serendipitous separation of fibre networks.

Conditions for investment 4: stability

- Fibre is both a object of policy and subject to regulation
- Finding a settled stance has not been easy; for example, operator O alibies regulator R's indecision by not investing, and R alibies O's non-investment by not deciding; it takes investment by competitor (V) to break the log jam; not that any delay much matters
- The position at European level is worse, because regulation is the C'ion's principal policy tool, and fibre has a very high policy priority; hence a history of frequent and changing interventions. Aim now is to provide regulatory stability until 2020. But is its commitment credible?

The trend

- Initially, command and control creates a universal network base
- Then overlaid by market-driven investments: in a core network by Mercury; in more extensive assets by ULL operators such as Talk Talk, Sky, etc; and by cable operators
- Now regulation and subsidy push for a fibre loop, which is less easily subject to unbundling: a step in the direction of C & C, driven by technology and regulation?
- Particularly with BT's unambitious version of fibre, which maintains most of the copper architecture, the transition does not much affect the look of the network.