THE RE-BIRTH OF THE TELECOM MONOPOLY

Is the industry broken and heading back to its monopolistic roots?

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The great sunk cost dilemma in competitive telecom markets

- **Telecom operators in competitive markets have a tendency to invest inefficiently.** Most investments are driven by competition-related commercial pressures. Financial models used to justify investment decisions are often based on commercial trends without taking into account significant future changes in market dynamics. Top managers of operators are often biased to support investments.

- **Going into new capex cycles operators have a tendency to see past investments as sunk costs.** The operators’ budgeting process usually takes a long time during which the competitive and industry landscape may change, rendering many of the assumptions obsolete in the implementation stage. Given the nature of telecom investments, namely impossibility to divest, operators often consider cost of their previous investments as sunk when entering new investment cycles.

- **Policies promoting excessive infrastructure competition are one of the key reasons for the mentioned inefficient investment behavior of telecom operators.** This includes for example policies aimed at enforcing spectrum ownership fragmentation or regulatory asymmetries to promote new market entrants.

In the following paper, we argue that as long as there are imbalances in a given telecom market, the internal dynamics of telecom operators’ budgeting and planning cycles favor both capex investment and a reduction in prices as competitive responses, and what seems uneconomical decisions.

Motives for telecom operators to invest

- **Overall motives to invest.** Changes in capex spending patterns at operators are often made as a result of commercial needs or as a response to commercial pressure. Very often, the motive for a significant capex expansion program is the desire to either breakaway from competition and commoditization (trying to differentiate through quality or new offerings — 4G for instance), which is a typical behavior for the leading operator in crowded / competitive markets, or the desire to catch-up with competition (on quality or products) for weaker competitors.

- **Financial motives to invest.** The financial rationale of capex programs is always measured on the basis of projections that typically span several years. In our experience, these projections typically use commercial assumptions that don’t assume significant changes to the current situation (price drops, product cannibalization, etc.), but project small variations of the status quo / known trajectories over significant periods of time. In fact there is always a set of projections (including market share gains / protection) that will make the investment decision profitable.

- **Internal motives to invest.** Chief Commercial Officers will always argue that their performance (especially if lower than competitors) is due to a lack of investment / subpar network or distribution, etc. Chief Technical Officers are always happy to invest, noting that the results are always predicated on achieving certain commercial assumptions they are not responsible for. The Chief Financial Officer, who should act as a referee can only judge the investment proposal or project on the basis of the commercial assumptions /projections supplied by the commercial team. In my experience, unless the CFO has absolute control (i.e., constrained balance sheets), decisions always favor investing as a response to commercial problems.
The sunk cost temptation

- **Timing**: Typically, investment decisions will be made primarily around budget time, and will take more than a year to allocate (planning, selection of vendors, etc.) and deploy (availability of contractors, site commissioning constraints).

- **Changing parameters**: By the time the capex project is under way, as commercial strategies unfold (typically within the first few months of the year) and operators react to each other’s offerings, the competitive landscape changes (prices dropping, other operators making the same type of investment, commoditizing new products), rendering many of the assumptions made in the business plan obsolete. In our experience however, there is almost never any challenge to ongoing capex spending or re-evaluation of the commercial assumptions on which an already committed program was based upon.

**The sunk cost temptation in the next cycle.** At the next budgeting / planning cycle, additional capacity will be considered as a given (whether in terms of additional traffic capacity, better quality and / or additional product offering). It is unclear how operators factor the cost of this capacity in their looking forward projections (in our experience they don’t), and we therefore believe that the investment becomes a sunk cost. The danger there is that if the capacity (now considered as “free”) is not filled within the previous commercial assumptions, it is always tempting to drop prices / offer more as it has become a sunk cost.

Long-term nature of telecom investments

Although this seems highly irrational, it can be explained by the nature of the investments. Telecom capex is a long lead investment, which has to be implemented before it can be sold. As networks are not commodities, unused capacity cannot be easily divested (half the investment is in civil works), so the temptation will always be to fill unused capacity at a profitable marginal price. Even in contexts where capacity is either scarce or unit demand is growing (US wireless, emerging markets GSM growth), increased traffic / product demand outweighs falling unit prices, but, we can still see per unit prices falling going hand with significant investments. On the other hand, where we can see examples where competition is balanced and investments are less chunky and more linked to demand (UK broadband, US cable) we can often see increasing prices.

Concerns about excessive infrastructure competition

The difference between the relatively rational markets and irrational ones is based on excessive infrastructure competition without enough opportunity to differentiate. The US cable and UK broadband industries have had relatively well balanced competition structures (all operators have viable market shares), nationwide in the UK, regionally in the US. Moreover both groups have been offering TV products which feature highly sought after premium content. In both cases, the operators benefit from an established infrastructure, and in the case of the UK, from access to shared infrastructure (Open Reach). This has allowed both of them to pass tariff increases to the consumers on a yearly basis (counterbalancing the impact of cord sharing).

Meanwhile, Europe suffers from its spectrum allocation structure and regulatory policies. Regulators have focused on providing spectrum to new entrants as a tool to increase competition. As spectrum cannot be resold, it has no value unless utilized once paid for. This leads operators with smaller market shares to consider spectrum as a sunk cost, where a marginal subscriber is always welcome, no matter what its profitability is. In the US by contrast, spectrum was traditionally auctioned to the highest bidder irrespective of the intended use, and has a market value (can be re-sold). Operators will therefore be able to arbitrate between the spectrum value and its marginal profitability.