

The wrong culprit for telecom trouble

European telecommunications companies are now worth about \$700bn (£443bn) less than when the UK began the world's first "third generation" (3G) auction in March 2000. These auctions are now routinely blamed for the travails of the telecoms industry and even – by extension – the world economy.

President Jacques Chirac recently protested to the European Union about the 3G auctions, the head of the United Nations telecommunications agency claimed that they "helped drive the telecoms industry into its crisis", and a Finnish minister even called them "the biggest industrial political failure since the second world war".

The critics assume three things: that the telecoms companies paid more for the licences than they thought the licences were worth; that this expenditure has reduced investment in 3G; and that it destroyed the telecoms companies' market value.

Sustaining these views requires little more than a fallible memory. There has now been so much bad news about the technology and about the lack of consumer interest in 3G services that it is hard to imagine any company voluntarily paid billions of dollars for a 3G licence. But volunteer they all did. Not only that but they celebrated their victories. The stock market was happy, and shortly after the UK auction Hutchison even resold part of its licence at a profit.

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In retrospect, of course, the licences look expensive. But in retrospect, shares or houses sometimes look expensive. Like any other market, an auction simply matches willing buyers and willing sellers – it cannot protect them against their own mistakes.

A more subtle complaint is that incumbent operators had to win 3G licences to protect their existing 2G businesses, so were "forced" to overbid. But all the main 3G auctions were ascending bid auctions, in which the price stops rising when the losers give up; so the price was set by losers who were new entrants with no existing 2G businesses to protect. Were these entrants – including Hutchison, France Telecom, Telefónica and Sonera – all naively bidding more than the helpless incumbents thought the licences were

worth? It seems unlikely: incumbents, with their established brands and infrastructure, could make much better use of 3G licences.

In the UK, two incumbents, but no entrants, competed to offer £2bn more for a larger licence – hardly a sign that the entrants had backed them into a corner. Even if the incumbents did think the entrants were overbidding, they always had the option of dropping out and buying the entrants later when valuations had settled down.

Some opponents of the auctions concede the bids were voluntary but argue they were damaging nevertheless: because the licences were so expensive, investment in 3G is lower and slower than it should be. This is odd: the auction fees are history; they have (almost) all been paid in full, cannot be

recouped by cutting investment, and make no difference to its profitability.

It is conceivable that capital markets are so inefficient that obviously highly profitable investment is being forgone because no one wants to fund it. It is more likely that the same bad news that now makes the licences look overvalued is also making further investment look unwise.

It is even possible that investment may now be too rapid. Two licence winners told the UK government that high licence costs would spur investment – perhaps because companies would be keen to prove that they could recoup their licence costs. And if high licence fees persuade governments to regulate companies more lightly and permit them to raise prices, investment will become attractive for all the wrong

reasons. Probably none of these effects is critical. Investment in 3G, as in anything else, is primarily motivated by attractive returns in the future – not by money spent in the past.

Then there is the final claim: that 3G licence fees wiped hundreds of billions off the value of European telecoms companies. Before accepting that view too quickly, look across the Atlantic. The US held no 3G auctions, yet telecoms companies lost just as much: in fact, they lost more. Even setting aside the collapses of Global Crossing and WorldCom, wireless companies such as Nextel and Sprint PCS each lost more than \$50bn in valuation. In the UK, the most distressed telecoms companies are not the licence winners but firms such as NTL – the disappointed runner-up – which has recently been

restructured. All in all, it seems a stretch to blame \$700bn of shareholder misery on \$100bn of 3G licence fees.

The main effect of the licence fees was simply to transfer \$100bn from shareholders around the world to certain European governments. This was both equitable, since the companies were buying a public asset that they valued this highly at the time, and efficient, since such a lump sum transfer is much more efficient than most forms of taxation. Efficient, equitable and voluntary government funding is not easy to find: perhaps we should be more enthusiastic about it.

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My responses to comments on the November 26th article
(5 comments that appeared in the UK edition of the Financial Times,
and 3 different comments that appeared in the International edition)

Letters, Financial Times, Monday December 9, 2002, UK edition, page 22.

3G auctions and charging one-off fees

From Prof Paul Klemperer.

Sir, Your correspondents argue among themselves about why the telecom companies were happy to pay the prices they did in the European third generation auctions, but do not offer any serious arguments against my point ("The wrong culprit for telecom trouble", November 26) that these fees simply reduced shareholder wealth by the amount of the transfer to governments without other significant effects.

Dr David Rudd (December 4) is correct that efficiency should be the main objective of spectrum pricing and indeed it was. But efficiency generally means allocating the spectrum to those who value it the most, which an auction achieves, and which

"administrative pricing" with bureaucrats choosing the lucky winners often does not.

Prof John Ure (November 29) is wrong to suggest that governments should instead have charged royalties on companies' revenues. This would be equivalent to a sales tax which would raise consumer prices, depress future profits, and therefore also discourage investment. (Hong Kong's royalty auction was flawed in other respects too; see my paper "Using and Abusing Economic Theory" at www.paulklemperer.org). In contrast, the one-off fees companies paid are now water under the bridge, and irrelevant both to the profitability of future investment and to prices.

Mr Jon Moynihan (November 28)

suggests that investment in 3G is lower than it should be; while my old classmate Ted Mercer (December 3) speculates instead that investment will be misdirected. But neither of them explains why having spent money on licenses in the past compels firms to make foolish decisions for the future. "Sunk costs" can affect future behaviour, but unless markets are dramatically inefficient it is unlikely that such effects are large. By charging one-off fees, governments minimised the effects of the auctions on 3G prices and investment.

Paul Klemperer,
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Letters, Financial Times, Monday December 9, 2002, International ed., page 12.

Effects of 3G auctions

From Prof Paul Klemperer.

Sir, Your correspondents offer no serious argument against my point ("The wrong culprit for telecoms trouble", November 26) that third-generation mobile auction fees simply reduced shareholder wealth by the amount of the transfer to governments without other significant effects.

Prof Christopher Peacocke (December 2) compares the auctions with the sale of Windows, but there is an important difference: additional copies of Windows are almost free for Microsoft to produce, while spectrum is a scarce resource. Perhaps the relevant international treaty should have made more spectrum available for 3G (although perhaps not much more, given what we now know about the technology and consumer demand). But given the spectrum that the treaty made available, the auctions created no artificial scarcity. The UK and German governments, whom Prof Peacocke singles out for criticism, sold as many licences as feasible, and the auctions were the fairest and most efficient means of allocating them.

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My old classmate Ted Mercer (December 3) speculates that investment in 3G may now be misdirected, but does not explain why having spent money on licenses in the past compels firms to make foolish decisions for the future. "Sunk costs" can affect future behaviour, but unless markets are dramatically inefficient it is unlikely that such effects are large. By charging one-off fees, governments minimised the effects of the auctions on 3G prices and investment.

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