

IS EUROPE HANDICAPPED IN HIGH-SPEED/CAPACITY BROADBAND NETWORKS?

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The Draghi Report “**The Future of European Competitiveness**”, published 9 September, is a powerful and important document containing recommendations that will shape future industrial policy in the EU.¹ It looks at competitiveness in general and focuses on key sectors in the European economy, including high-speed/capacity broadband telecoms networks.

In the report, Mario Draghi argues European policy has led to a fragmented telecoms sector unfavourable for investment compared to the United States. To remedy this and bolster European competitiveness, he advocates policies that place greater emphasis on recognizing innovation benefits that would derive from consolidation.

A number of commentators, such as Jenny Lindqvist Senior Vice President of Ericsson, have applauded his calls for greater consolidation.² Others, such as Richard Feasey (currently a member of the UK Competition and Markets Authority and formerly of Vodafone, among others), have looked back at how policies frustrated past corporate consolidation attempts in Europe and express concerns that policy intervention aimed at facilitating more consolidation is unlikely to deliver better outcomes than the market.³

At the heart of Draghi’s report is the claim regulation and competition policies have disincentivized consolidation “favouring a multiplicity of smaller players in each [national] market”. While there is some truth to this, these policies have resulted in lower telecom prices in Europe than in the US and clearly benefited consumers.

Draghi implies; however, European consumers are missing innovative services because low prices and fragmentation contribute to returns on capital employed falling below the weighted average cost of capital. In this financial climate, he claims innovation is stifled and as a result European competitiveness is lowered.

Draghi also slams member states in Europe for having assigned spectrum licences in an uncoordinated fashion and designed auctions “to command high prices (for 3G, 4G and 5G) over the past 25 years, with limited consideration for investment commitments, service quality or innovation”. These opinions misrepresent actual policy and fail to recognize that spectrum licences have often gone for higher prices in the US.⁴ For example, CEPA showed higher prices in the US in its assessment of mmWave frequencies for 5G.⁵

¹ https://commission.europa.eu/topics/strengthening-european-competitiveness/eu-competitiveness-looking-ahead_en, 9 September 2024.

² As reported 10 September, 2024 at <https://www.datacenterdynamics.com/en/news/eu-urged-to-encourage-telecoms-mergers-by-former-italian-pm-draghi/>

³ See ‘Policitisation of Telecoms’ and ‘Revisiting Mannesmann’ at <https://www.linkedin.com/in/richardfeasey/>, October 2024.

⁴ Draghi appears not to be alone in criticising European spectrum auctions. A group of telecom policy commentators make similar claims in ‘The Future of European Telecommunications: In-depth analysis’, CERRE, September 2024 at https://cerre.eu/wp-content/uploads/2024/09/CERRE_The-Future-of-European-Telecommunications-In-depth-Analysis_FINAL.pdf

⁵ See CEPA (2023) ‘Spectrum Auctions: mmWave Frequencies for 5G Mobile’ at https://www.cepa.co.uk/images/uploads/documents/mmwave_advice.pdf

HOW RELIABLE IS THE DRAGHI STORY?

Depending on who you ask and what data are analysed, commentators can paint a picture showing US telecoms is superior to Europe or the other way around. Indeed, there are those in the US who look to the current European model as a way for the US to improve competitiveness in telecoms!⁶

The Draghi storyboard portrays European telecoms as lacking scale, with operators facing additional transaction costs across national borders, a regulatory framework that promotes access to infrastructure and shortcomings in harmonisation policies.

In his view this all conspires to lower competitiveness for Europe, notwithstanding lower prices due to competition. He argues that squeezed margins in Europe undermine investment and innovation. Consolidation is seen as paving the way to lowering transaction costs, delivering scale economies, and bolstering margins. But where is the evidence?

Draghi delivers his opinion on innovation after assessing mainly high-level regional data. For example, one chart shows capex per capita in Europe trailing the US, Japan, and South Korea – all bastions of high-tech companies.

Analysis of company capex data by Joanna Bryson and colleagues, however, suggests that consolidation in Europe would not necessarily deliver the gains Draghi claims.⁷ The authors look closely at capex and suggest greater concentration might lead to lower investment as competition is lessened.

Even if consolidation were to promote greater investment, this would likely manifest in greater

network coverage rather than innovation. (I shall return to innovation shortly.) If the US is ahead of Europe in this regard, it should be reflected in key metrics like fibre rollout. However, according to Ofcom's International Broadband Scorecard 2023⁸, the large European countries were broadly comparable with the US at the end of 2022. Europe may be behind a little in terms of fibre coverage, but it is not lagging the US significantly.

As the data reported in the Draghi report are capex and hence financial, they show much higher per capita adjusted capex in the US. However, a significant factor behind the higher figure is the expenditure undertaken by US mobile operators on acquiring spectrum licences. Spectrum auction fees in the US have exceeded \$100bn in recent years and are much higher than the auction fees that have been paid by European operators for similar spectrum.⁹

Is higher capex in the US reflective of higher costs in the US? Dine and Atkinson (2022)¹⁰ reason, in rebutting populists in the US who portray Europe as superior to the US, that this is the case:

“Because the U.S. and European broadband industries are composed of markedly different labor markets, serve customers with different geographic makeups, are subject to differing taxes and subsidies, and must allocate different proportions of their revenues to various costs in order to stay competitive, to ignore these inherent differences in the two markets is to write a false story of the regulatory differences that have made one market “succeed” where the other has “failed.””

The quotation above could apply with equal force to Draghi.

⁶ See the references and citations proclaiming European telecoms as superior to US telecoms in Jessica Dine and Robert D. Atkinson (2022) ‘Apples vs. Oranges: Why Providing Broadband in the United States Costs More Than in Europe’, ITIF (Information Technology & Innovation Foundation) at <https://itif.org/publications/2022/07/11/apples-vs-oranges-why-providing-broadband-in-the-united-states-costs-more-than-in-europe/>

⁷ Joanna J. Bryson, Lisa Garbe, David Backovsky, and Helena Malikova (2023) ‘Big Telcos Aren’t Necessarily Better: A Case Study of EU versus US Market Concentration’ working paper, Hertie School, Berlin at <https://osf.io/m42uh/download>

⁸ See <https://www.ofcom.org.uk/phones-and-broadband/coverage-and-speeds/international-broadband-scorecard-2023-interactive-data/>

⁹ See S&P Global ‘Big 4 wireless carriers spent \$100B on 5G spectrum: Was it worth it?’ at <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/big-4-wireless-carriers-spent-100b-on-5g-spectrum-was-it-worth-it-68488095>

¹⁰ Atkinson and Dine (2022) ‘Apples vs. Oranges: Why Providing Broadband in the United States Costs More Than in Europe’ Information Technology & Innovation Foundation, July at <https://itif.org/publications/2022/07/11/apples-vs-oranges-why-providing-broadband-in-the-united-states-costs-more-than-in-europe/>

The Draghi report talks about innovation in telecoms but offers little detail. Many see telcos as predominantly investing in network coverage and quality of service, rather than disruptive technologies that are innovative.¹¹ According to Fierce Network:

“Telecom operators appear content to let industry vendors do the heavy lifting when it comes to research and development (R&D).”¹²

For example, Fierce show that in 2022 Huawei of China spent more than \$23bn on R&D, and the combined efforts of European giants Ericsson and Nokia was \$9.5bn. Of the telcos, outside of network build, expenditure on R&D shows NTT in Japan with the largest budget at a little over \$3.1bn. However, the combined spend on R&D by BT, Telefonica and Orange in Europe exceeds that of AT&T in the US, which has one of the largest R&D budgets among telcos in the US. Bryson and colleagues show that large European telcos have higher capex values than their US counterparts.¹³

Draghi’s negativity about European failings in telecoms would surprise some in the US who believe Europe has a more competitive landscape providing greater benefits. Six US senators in July this year wrote to both the US Department of Justice, the federal competition agency, and the FCC to express opinion against the proposed acquisition by T-Mobile (3rd largest wireless carrier) of UScellular (4th largest wireless carrier), suggesting consolidation has been detrimental and resulted in less competition.¹⁴

However, while comparing apples and oranges is notoriously challenging and opinions vary on investment and market concentration, Draghi’s observations about radio spectrum policy are controversial. He claims spectrum policies have been uncoordinated in Europe and this is a key reason Europe is less competitive.

Draghi claims spectrum policy has been “designed to maximise frequencies’ pricing.” This is wrong. EU policy is and has been directed towards promoting efficient use of radio spectrum assets (optimal use, see para 102 preamble in European Electronic Communications Code (EECC) 2018), though some auctions may have had the unintended effect of raising revenue and a few might have set reserve prices that were too high.¹⁵ Further, Article 4 of the EECC emphasizes that member states in the EU should coordinate and plan strategically their radio spectrum policies – which is executed through the Radio Spectrum Policy Group.

European operators have generally spent less on spectrum than their US counterparts – and US wireless licences have typically been of a shorter duration (typically 10 years – though it is understood that US spectrum licences would be renewed at the end of their term). In both the US and Europe radio spectrum assets can be traded, and this has occurred largely alongside M&A activity.

But the claim spectrum auctions are designed to maximise the prices of frequencies is wrong. Where corporate entities paid high fees for spectrum, such as in the 3G auctions way back in 2000, this was mainly due to optimistic market expectations about monetizing mobile banking that failed to materialize. At the time almost no-one was proclaiming touch-screen smartphones, search engines and social media were the future of mobile. If they did, they would have recognized how the then nascent Internet players like Amazon and Google would come to dominate value generation in the market, not telcos.

Further, Facebook (now Meta) and Twitter (now X) only came into existence in 2004 and 2006 respectively. Today nearly 50% of the combined traffic on the global Internet is due to these companies.¹⁶

¹¹ There is likely an indirect effect on innovation due to extending network coverage.

¹² Fierce Network (2023) A. James Ruoff ‘Here are the telecoms spending the most – and least – on R&D’ see <https://www.fierce-network.com/5g/here-are-telecoms-spending-most-and-least-rd>.

¹³ See section 4 and Figure 2 in their paper, *op cit*.

¹⁴ See https://www.warren.senate.gov/imo/media/doc/final_-_warren_letter_to_doj_and_fcc_re_t-mobile_uscellular_merger.pdf

¹⁵ See Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (Recast) at <https://eur-lex.europa.eu/eli/dir/2018/1972/oj>

¹⁶ See <https://senalnews.com/en/data/what-percentage-of-internet-traffic-do-technology-giants-generate>

One leading European tech company, Nokia, and in 2000 a major global player, even had the benefit of spectrum licences awarded by beauty contest in its home country Finland but went on to miss the exploding tech market by failing to recognize the significance of touch-screen phones.¹⁷

I am not so sure the assignment of spectrum licences in Europe has been as detrimental as Draghi and others suggest. The story is more involved and the missed big tech opportunities in Europe are puzzling. However, I would agree that providing greater clarity over spectrum renewals would be beneficial going forward.

If future merger policy applicable to telecoms in Europe is going to put greater emphasis on innovation effects, it is crucially important that we have a clear and common understanding on what innovation in telecoms is and which players are delivering the disruptive innovations that bolster competitiveness.

In my view Draghi's report identifies many interesting issues, but in regard of telecoms he oversimplifies the story.

¹⁷ See Maalouf, Georges & Jallad, Issam (2024) 'How Nokia Missed the Smartphone Revolution: A Case Study of

Strategic Failure' *Journal of Economics and Technology Research*. 5. 57. 10.22158/jetr.v5n1p57.

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