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As Fixed Wireless Wreaks Havoc on Cable, are Smaller ISPs Next?



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Key Points:

- T-Mobile and Verizon have been disrupting the cable internet business with their fixed wireless access (FWA) service bundled with smartphone plans.
- The incremental cost to offer this service is minimal, which has led to unprecedented market share growth for T-Mobile and Verizon at the expense of cable companies Comcast, Charter, and Altice USA.
- The sustainability of FWA and the associated share gains from cable is an outstanding question, but look for current trends to continue for the foreseeable future.
- T-Mobile and Verizon are offering FWA in markets where they have excess network capacity, which means smaller internet service providers (ISP) are exposed to competitive threats from the wireless operators.
- However, for now we think the wireless operators will continue to prioritize urban and suburban markets where the growth prospects are attractive, in addition to unserved rural markets.

Inside...

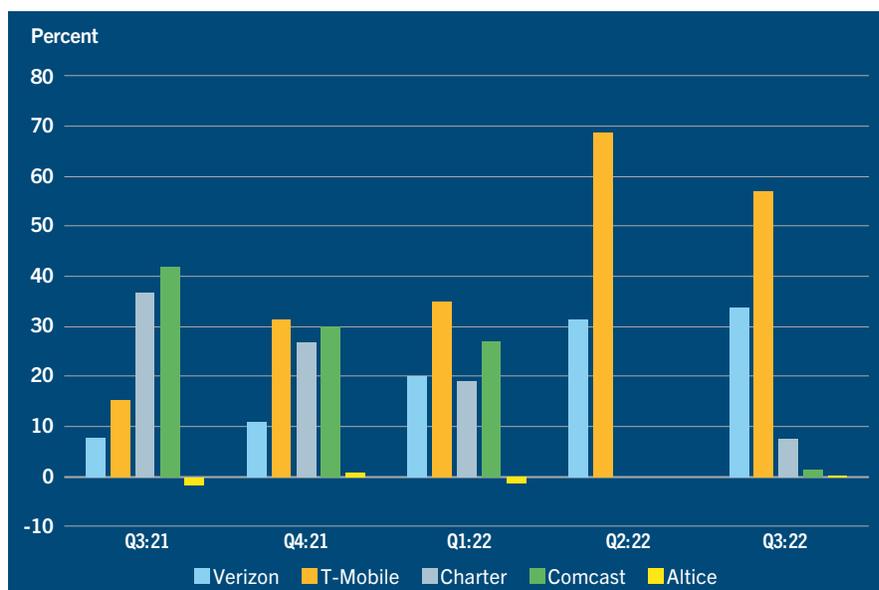
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Introduction

The national wireless operators, most notably Verizon and T-Mobile, have been wreaking havoc on the internet business of cable companies. The wireless operators are looking for new growth opportunities and have set their sights on the home internet market. Utilizing their wireless network, they have begun deploying fixed wireless access (FWA) in markets where they have excess network capacity. (Fixed wireless access is an internet option that connects one fixed location, like a house, to the internet via a wireless network.) Advancements in antenna technologies and the efficiencies gained with 5G has enabled wireless operators to cost-effectively deploy this service. And combined with price guarantees and bundled discounts, they are able to offer a competitive alternative to cable’s hybrid fiber-coaxial service.

The level of share gains are unprecedented and leaves us with two questions: 1) are the gains sustainable, and 2) to what extent are fixed-line broadband operators in smaller and/or rural markets exposed to this trend. In this report we attempt to answer these questions, and delve into some of the market dynamics driving this trend.

EXHIBIT 1: Share of Internet Additions



Source: Company reports

Fixed Wireless

The national wireless operators have spent billions of dollars on mid-band spectrum that, when combined with 5G, is adding a step-function increase in network capacity with faster data speeds. And given that the smartphone market is maturing with slowing growth, the wireless operators are hunting for new growth opportunities, fixed wireless is a natural market extension for them to enter. But not all fixed wireless network providers are the same, and their value propositions can vary. Verizon and T-Mobile have already spent billions building their mobile network, so offering a fixed wireless connection utilizing the same cell sectors as their smartphones use has marginal cost implications. The bundle of these two services – smartphone rate plan and fixed wireless – can be a compelling offer.

For pure-play FWA operators, the lack of operating leverage and bundling options will make it more difficult for them to disrupt the fixed-line broadband market.

Taking Market Share from Cable Operators

Over the last five quarters, Verizon and T-Mobile have upended the broadband market and taken an unprecedented amount of market share from Comcast and Charter (*Exhibit 1*), breaking a two-decades long trend.

Over the last 20 years, Comcast has added at least 100,000 broadband subscribers per quarter with one exception – one quarter during the financial crisis of 2008-2009 with only 65,000 broadband additions.

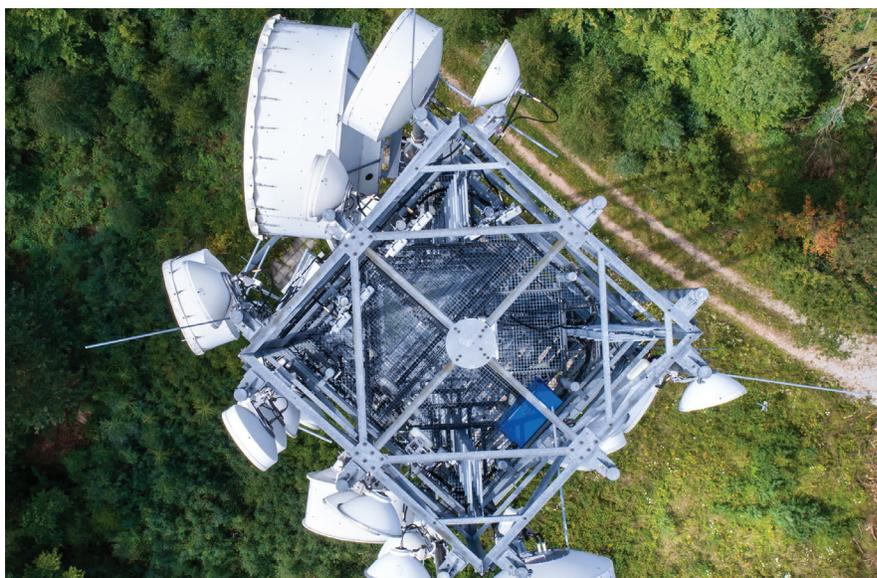
We believe the wireless carriers have successfully taken share in the value segment through their bundling strategy. For those consumers who are price conscious (and therefore presumably not as concerned about what type of network delivers their broadband) and are looking for a bundle option, T-Mobile or Verizon is an attractive option. Verizon is offering home internet starting at

\$25 per month with a qualified 5G mobile plan that comes with a 10-year price guarantee. From a market perspective, T-Mobile's chief marketing officer told investors that two-thirds of its FWA customer additions in Q2 came from suburban and urban environments, where they are switching from cable, and one-third came from unserved rural markets.

The cable companies have gotten the wake-up call and have responded with aggressive pricing of their own. For example, Comcast is now offering its 75Mbps plan on a 2-year contract for \$25 per month. Charter Communications recently introduced Spectrum One, which includes a single mobile line and internet service (300Mbps speed plan) for \$49.99 per month.

How Long Can it Last?

The national wireless operators say they have enough capacity to support several years of fixed wireless growth before they will run into network problems. In fact, T-Mobile has set of goal of 6 million to 8 million connections by 2025, up from its current install base of 2.1 million. However, the sustainability of their growth trajectory is debatable, as it boils down to scalability and cost.



Wireless networks do not have the same level of operating leverage as fixed-line broadband networks. One does not need to look any further than the height of the pandemic when internet traffic soared as much as 60%. In a wireless network, there is a strong (negative) correlation between network traffic and speeds; as network traffic increases, speeds decrease. And in order to maintain a certain level of network performance, additional capacity needs to be added. This can be done by adding more cell towers, and/or adding more sectors to an existing site. (Over time, evolving radio frequency technology also provides additional incremental network capacity.)

We do think there will come a time when the national wireless operators may need to scale back their fixed wireless ambitions, but the decision is not so straightforward. For example, if their fixed wireless traffic was beginning to drive involuntary churn in their smartphone business, national wireless operators may decide to scale back their efforts, as postpaid smartphone subscribers carry a high valuation with investors. Alternatively, if they are able to supplement their network with a sufficient amount of unlicensed spectrum, they might be able to more cost-effectively scale their network to support additional growth.

On the cost structure side, we note that cable enjoys extremely high gross margins (think over 80%) on their broadband service. Many of these networks were built years ago and as such have been heavily amortized. This gives the cable companies the ability to drop prices to preserve market share – something we are starting to see as the wireless operators gobble up most of the new customer additions.

Another important way to look at FWA versus fixed-line (fiber in particular) is the recently enacted Infrastructure and Investment Jobs Act, which carves out \$65 billion for broadband.

It prioritizes fiber networks over FWA, and has limited FWA deployments to markets that are deemed High Cost or Extremely High Cost (where the cost to deploy fiber-to-the-home is not justified). The government's rationale is based on the notion that fiber is "future proof" and can better handle the increased demands of future data applications and network traffic. This concept certainly bodes well for cable over the long-term.

Smaller ISP Vulnerability

With the large cable companies losing market share to FWA, are smaller fixed-line ISPs exposed to the same kinds of risks? Additionally, are standalone FWA providers a threat to the aforementioned operators (as they tend to skew towards rural markets)?

Given that national wireless operators are targeting markets where they have excess capacity, smaller ISPs do have exposure to FWA competition as there tends to be excess capacity in these parts of the network. However, we think the risk is small as the more densely populated markets offer a larger growth opportunity. Perhaps they might target competitive tier two or three markets if and when they exhaust suburban and urban markets, but that is likely one to three years down the road.

As for the competitive threat from pure-play fixed wireless companies, we don't think there is much to worry about. The fact that these operators do not offer a smartphone/FWA bundle automatically makes them less of a threat to incumbent fixed-line operators. That leaves them to compete on price, which may work in markets where neglected DSL networks exist, but we don't think they would have much success in taking share from hybrid fiber-coaxial, and would struggle mightily against incumbent fiber-to-the-home operators.

Summary

Deploying FWA when you already have a mobile network built offers some growth opportunities with relatively small incremental costs. We think this is a core driver behind why T-Mobile and Verizon have gone down this path. Couple that with the fact that their core market (postpaid smartphone customers) is approaching saturation, and it's not surprising to see what is happening. We expect the wireless operators to enjoy continued success with their FWA service for the foreseeable future. For a large segment of the broadband market, having network speeds of 100Mbps (FWA speeds) is sufficient and if it means they can save money, consumers will sign up.

However, wireless carriers will likely face a critical decision point, especially if FWA traffic starts to degrade smartphone throughput speeds, and smartphone churn

increases as a result. In this case, wireless carriers will need to either increase their capex, deemphasize FWA, or maintain the status quo and deal with poorer network performance. For ISPs in smaller markets, we don't view FWA as a major threat at this time – we see the national carriers targeting urban and suburban markets where the upside in customer additions is more attractive. ■

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