June 26, 2018

T-Mobile – Sprint Merger

On April 29, 2018, T-Mobile US and Sprint Corporation announced a merger agreement that could change competitive conditions within the telecommunications industries. T-Mobile is valuing Sprint at approximately $59 billion. The companies compete directly with one another in the mobile wireless voice and data services sectors for both residential and business customers. In addition, the companies claim, the merger would enable them to compete directly with traditional in-home wireline broadband services.

The Two Companies

T-Mobile

T-Mobile is the third-largest wireless carrier in the United States, serving about 72.6 million customers under the T-Mobile and Metro PCS brands. It is controlled by Deutsche Telekom AG, which indirectly holds about 62% of T-Mobile's stock. Deutsche Telekom is based in Bonn, Germany, and provides fixed broadband and wireless services to customers in more than 50 countries.

Sprint

Sprint is the fourth-largest wireless carrier in the United States, serving approximately 54.6 million retail and wholesale wireless customers at the end of 2017 under its Sprint, Boost Mobile, Virgin Mobile, and Assurance Wireless brands. In addition, Sprint provides long-distance voice services to other telecommunications companies and select businesses over its landlines. Sprint also provides part of the backbone of the internet. As a Tier 1 internet backbone provider, it can reach every other network on the internet without paying other companies to carry or transfer data. Other Tier 1 internet backbone providers within the United States include AT&T, Verizon, and Century Link.

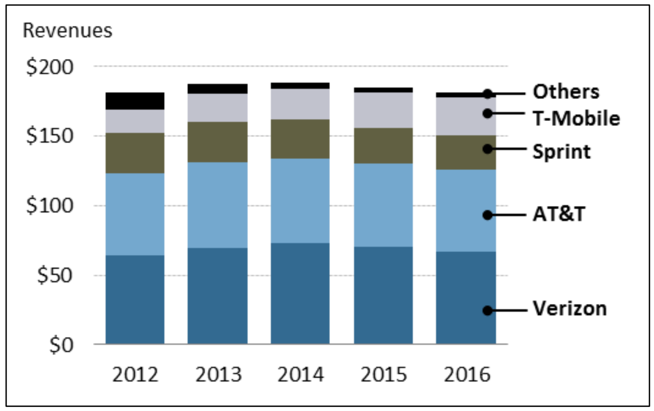
Sprint is controlled by SoftBank Group Corp., which indirectly holds about 84% of Sprint's stock. SoftBank is based in Tokyo, Japan, and provides mobile and fixed-line services in Japan. If the transaction is completed, Softbank would join Deutsche Telekom as a major holder of T-Mobile's shares.

Consumer and Industry Trends

Four national carriers handle almost all mobile wireless traffic in the United States: AT&T Inc.; Verizon Communications Inc.; T-Mobile; and Sprint. The Federal Communications Commission (FCC) estimates that these four carriers accounted for about 98% of the nation's mobile wireless service revenue in 2016.

Mobile wireless companies generate revenue from selling mobile and data services and equipment, such as mobile phones and tablets. As **Figure 1** illustrates, U.S. mobile wireless service revenues peaked in 2014. The revenue decline is attributable to several factors. There is little growth in the number of lines, as the vast majority of potential users already have mobile phones. Many carriers' service plans no longer include two-year contracts in conjunction with subsidized smartphones, so customers can terminate service without penalty if a competing provider offers lower service fees. Carriers have generally revised their service plans to offer more data usage for the same amount, or less, than previously. Also, the proliferation of public Wireless Fidelity (Wi-Fi) services has enabled mobile phone users to bypass their carriers' mobile wireless networks, thereby limiting mobile carriers' revenue.

Figure 1. Service Revenues of Mobile Carriers
(dollars in billions)



Source: FCC 19th and 20th Mobile Wireless Competition Reports, citing data from UBS Investment Research.

Notes: Revenues not adjusted for inflation. The decline in the share of "Others" reflects industry consolidation.

Regulatory Review

Before the companies may complete the merger, three government entities must review it: (1) the FCC, (2) the U.S. Department of Justice (DOJ), and (3) the Committee on Foreign Investment in the United States (CFIUS).

The FCC evaluates whether the transaction would be in the public interest, pursuant to sections 214(a) and 310(d) of the 1934 Communications Act, as amended. The FCC may approve the merger without conditions, approve the merger with conditions, or designate the merger for a hearing by an FCC administrative law judge.

DOJ reviews the transaction to determine whether it would substantially reduce competition, as prohibited by Section 7 of the Clayton Antitrust Act of 1914. DOJ may allow the deal to go forward unchallenged, enter into a negotiated consent agreement with the companies, or seek to stop the transaction by filing for a preliminary injunction in federal court.

CFIUS is an interagency committee that reviews foreign investments in the United States to determine whether they threaten to impair national security or would result in foreign control of critical infrastructure that could impair national security. The President may block foreign investment transactions that threaten to impair national security. Alternatively, CFIUS may clear a transaction subject to conditions designed to mitigate the perceived risks to U.S. national security the transaction otherwise would pose, or may take no action and thereby allow a transaction to proceed as proposed.

Potential Issues for Regulatory Review

Within the last 10 years, T-Mobile has twice considered merging with another mobile wireless carrier. Each time, regulators indicated that they would seek to prevent the transaction out of concern that it would reduce competition.

In 2011, after AT&T announced its intention to acquire T-Mobile from Deutsche Telekom, DOJ announced that it intended to seek to block the acquisition. In a press release, DOJ stated that the proposed acquisition would substantially lessen competition for mobile wireless communications in the United States. AT&T ended the takeover attempt and paid Deutsche Telekom a break-up fee that included $3 billion in cash and spectrum valued at about $1 billion. The fee enabled T-Mobile to offer innovative features at lower prices and thereby gain market share.

More recently, Sprint and T-Mobile abandoned merger discussions in 2014 after the FCC and DOJ suggested that the combination of the nation's third- and fourth-largest mobile wireless carriers could lead to higher prices and fewer choices, particularly for consumers who are not able or willing to spend large amounts of money.

Defining the Relevant Product/Service Market. Since those earlier merger efforts were blocked, the telecommunications market has undergone significant change. As part of their reviews, the agencies must examine the businesses of T-Mobile and Sprint both in terms of what they sell (a product/service dimension), and where they sell it (a geographic dimension). The companies have stated that they are increasingly competing with other service providers as wireless, cable, satellite, and content-related services converge. Regulators will need to determine whether the relevant market for analysis is mobile wireless service only, or whether the convergence of previously separate telecommunications services requires them to define the market in a different way.

For example, since 2017 AT&T has expanded by acquiring DIRECTV, a satellite video subscriptions service, and Time Warner Inc., which owns cable networks, a television studio, and a movie studio. AT&T has launched WatchTV, an online subscription video service, as a perk for consumers who purchase certain wireless plans. Neither T-Mobile nor Sprint currently offers a proprietary video subscription service.

Market Concentration in Mobile Wireless Segment. If regulators determine that the mobile wireless market is distinct from the telecommunications market as defined in some other way, then they would assess the merger's competitive impact, in part, by measuring the concentration of the industry before and after the merger.

Antitrust authorities often use the Herfindahl-Hirschman Index (HHI) to measure how a merger could affect market structure. The HHI is calculated by squaring the market share of each firm competing in the product market and then summing the resulting numbers. This formula gives proportionately greater weight to larger market shares. For communications companies, market shares can be measured by revenue or number of subscribers.

Based on 2016 revenue data described in **Figure 1**, the HHI of the mobile wireless industry was 2845 points. Post-merger, the HHI would be 3256. Thus, the increase would be 410 points. According to the 2010 merger guidelines published by DOJ and the Federal Trade Commission, markets with HHIs above 2500 are highly concentrated, and mergers in highly concentrated markets that involve an increase of more than 200 points will be presumed to be likely to enhance market power. Thus, if DOJ were to define mobile wireless as a separate market, it would likely presume that the proposed merger would give AT&T and Verizon as well as the merged T-Mobile-Sprint greater pricing power. The parties may rebut DOJ's presumption by providing persuasive evidence that demonstrates the contrary.

Competitive Impact on Pre-Paid Customers. Wireless carriers serve two types of retail customers: postpaid and prepaid. Postpaid customers are billed monthly, after service has been provided. Prepaid customers pay in advance of receiving services. Prepaid subscribers may lack the credit background or income necessary to qualify for postpaid services. Based on the data in **Table 1**, the HHI of the prepaid subscriber mobile wireless submarket is currently 2686. Post-merger, the HHI would be 3902, with a change of 1216. Under the merger guidelines, DOJ would presume the merger would likely enhance carriers' market power in this segment of the market.

Table 1. Carrier Market Shares by Subscriber Type
As of March 31, 2018

	Postpaid Subscribers	Prepaid Subscribers
T-Mobile	14%	38%
Sprint	11%	16%
AT&T	27%	29%
Verizon	39%	9%
Others	8%	8%
Total	283 million	55 million

Source: CRS analysis of data from S&P Global Market Intelligence and company documents for 1Q2018.

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