

# Motorola FOCUS Article

Saturday, March 3, 2018

9:05 AM

## Motorola Dominates Its Mission-Critical Niche

William Fitzsimmons

02 Mar 2018

### In Focus

- [MSI](#)

Following the split from Motorola Mobility and years of mergers and acquisitions, [Motorola Solutions \(MSI\)](#) has established a formidable niche as the dominant supplier of land mobile radio technology for law enforcement, firefighters, and emergency first responders, carving out an estimated 80% market share in the United States. Motorola Solutions has divested itself of low-margin segments while doubling down on emergency communications infrastructure and two-way radios and expanding its software-as-a-service offerings. After some growing pains from restructuring, the company now generates more attractive returns on invested capital and benefits from tight customer relationships with city, state, and federal governments, in addition to brand equity, thanks to its established legacy of reliability in mission-critical situations. We see emergency equipment largely as a nondiscretionary spending item and assert that technological disruption typically has a muted impact on public-sector services, lending credence to our narrow economic moat rating.

We expect the company to post low- to mid-single-digit top-line growth over the next five years, largely attributed to the growing backlog of business, the shift to recurring revenue, the sustained upgrade cycle from analog to P25 digital systems in the U.S., and continued integration of recent acquisitions. Furthermore, as nascent products scale, we see opportunities for material operating margin expansion. We postulate that Motorola's software products have the greatest growth prospects, with comprehensive computer-aided dispatch and 911 call center offerings.

However, two headwinds remain for Motorola: the implementation of FirstNet and the advent of LTE technological adoption. Both could present challenges for Motorola in the future, but we do not see them as imminent enough to supplant the company's narrow economic moat. We will watch for any municipalities or state governments adopting FirstNet or an LTE-based solution in the years ahead.

### Switching Costs Are High

We believe Motorola Solutions has entrenched itself with a narrow economic moat emanating from switching costs and intangible assets. After splitting from Motorola Mobility in 2011, Motorola Solutions reorganized its product portfolio through mergers and acquisitions and divestitures to become the pre-eminent supplier of radio communications for law enforcement and first responders, contracting with city, state, and federal agencies. It has also built out its software business. The company reports in two segments: products (20% operating margin) and services (14% operating margin). The products business' two subsegments are devices, composed of Motorola's two-way radios, and systems, which contains infrastructure such as the base stations, consoles, and repeaters that allow the radios to communicate.

The products business (60% of revenue and an estimated 69% of total company profits) has built a sizable share of the public safety radio market in the U.S. through establishing switching costs in its offerings over the years. Motorola Solutions contracts with government entities to build infrastructure (base stations, consoles, and repeaters) with a maintenance component of 10 to upward of 20 years, while selling radios that might last 8 to 10 years. We believe this has created a relatively stable cycle, as government agencies were often locked into long-term contracts and opted to upgrade through multiple iterations of Motorola radios over the useful life of the infrastructure. Motorola's analog and (in recent decades) P25-compliant digital land mobile radio networks are interoperable, so radios from Motorola's competitors can communicate over Motorola's infrastructure or with Motorola's radios. Thus, we believe switching costs have been created through other means.

First, Motorola Solutions has cultivated relationships with government procurement personnel over the years, effectively navigating the labyrinthine bidding and board approval processes that occur in city, county, and state contracts. We believe this has manifested itself in the numerous sole-source contracts that the company is frequently awarded. Customers have historically demonstrated they are reluctant to defect to Motorola's competitors after the company wins an initial bid and systems are integrated. Once Motorola has set up a customer on a system and the subsequent purchasing vehicle is in place, it is often easier for governmental officials to re-sign, alter, or extend a contract with Motorola than jump over the regulatory hurdles to open a new competitive bidding process. Major U.S. cities such as Charlotte and San Francisco have extended old contracts. In other cases, cities and counties will use cooperative contracts in which officials adopt pricing based on comparable deals, as has recently occurred in Washington, D.C., and Fort Worth. Motorola supplements these relationships by frequently donating equipment to local governments to lock in future deals. We believe these donations, coupled with tight relationships with customers over the years, would be difficult for an upstart competitor to match.

Second, Motorola regularly embeds proprietary extras and add-ons in its products. For example, the company offers encryption software for security purposes that does not interact well with non-Motorola radios due to differences in the frequency of encryption key changes. Third, reports suggest that the push for further interoperability has in some cases aided Motorola Solutions, in that statewide radio systems that once serviced state troopers, among other entities, are being relied on more and more frequently by the underlying counties and cities. Through its relationships, switching costs, and brand, Motorola has already built an estimated 90% of statewide radio systems. Lastly, we believe that because first responders are sent into high-risk situations where the reliability of the product is paramount, training costs, along with the reluctance of government officials to experiment with competing radio brands, inhibit deviating from contracting with Motorola. These factors have created relatively stable spending for radios, infrastructure, and maintenance, which we believe is evident in Motorola Solutions' increasing backlogs the past few years.

On the services side (40% of revenue and an estimated 31% of profits), in the managed and support services subsegment, Motorola has largely built out its software offerings, and the business has obtained a suite of computer-aided dispatch and command center solutions through acquisitions such as Spillman and Airbus DS Communications. As with the company's hardware products, the mission-critical nature of these solutions, along with training costs for personnel, would make it difficult for a city or county to switch to a competing offering. Furthermore, 911 dispatch products are government-mandated necessities, which precludes some scenarios where macroeconomic or budgetary headwinds would reduce the discretionary spending of Motorola's current customer base. The software and hardware switching costs support each other, as few competitors possess the endpoint hardware expertise to develop a call center program, for example, that could seamlessly integrate with Motorola's plethora of radios used by first responders nationwide.

Motorola competes in an industry where its offerings are purchased to optimally perform in mission-critical, potentially dangerous situations, and we believe brands with a history of safety and reliability are prized above comparable products, supporting our intangible asset argument. The company's rugged two-way radios have established themselves as the gold standard for the emergency communications market. City, county, and state officials have historically demonstrated they are willing to pay a premium for Motorola's radios, even when competitors boast comparable products that pass the same regulatory tests. Thus, Motorola Solutions has recently charged upward of \$5,000-\$7,500 per radio in its government contracts, above peers. We believe this argument is further supported by Motorola's control of nearly 80% of the U.S. first-responder handset market, outpacing all direct competitors at this time. Motorola's pricing power underscores our thesis that the business' brand continues to benefit from intangible assets, cementing a narrow economic moat.

## **Success Hinges on Government Relationships**

We believe Motorola Solutions' performance is contingent on sustained relationships with city, county, and state governments. While we believe public safety for first responders in mission-critical situations is a nondiscretionary spending item for governments, in dire situations, budget cuts have and can occur.

We see FirstNet and the advent of LTE technology as potential negatives for Motorola's land mobile radio technology. While we still believe the business has a narrow economic moat and stable trend, small LTE systems or hybrid systems are planned for 2018 through 2020, most notably a public safety LTE network specifically for the 2018 Winter Olympics in South Korea. Most LTE systems that are planned are private networks, operating in the mining or utility industries. However, if these private networks or the network in Pyeongchang were to demonstrate the technology as a value-based proposition for governments or public safety officials, it could initiate industrywide technological change at a faster rate than previously anticipated. Motorola does have a public safety broadband and LTE business, with the company contracting with customers for private networks, meaning it could eventually be a beneficiary of LTE technology. With an estimated \$75 million in sales and deals in Los Angeles and Irving, Texas, among a few others, we see this as nascent but will be closely tracking growth over time.

Additionally, critics contend that Motorola has leveraged looser regulations in the U.S. that create a less competitive bidding process, leading to inflated radio prices compared with equivalent devices sold abroad. We do see some risks from potential government backlash due to perceived disparity in pricing between the U.S. and Europe, particularly as the Trump administration has been keen to highlight contractor relationships deemed inequitable for the U.S. government.

We believe the company is in subpar financial health, as its cash balance has dwindled and net debt has steadily increased over the past few years. As of year-end 2017, cash had diminished to \$1.2 billion while long-term debt sat at \$4.4 billion. This gives us a leverage profile near 2.8 times EBITDA, which we view as being on the higher end of the spectrum for a technology company. Compounding this dynamic, Motorola reported its pension was underfunded by nearly \$1.5 billion.

While we applaud management for returning cash to shareholders through generous stock buybacks and dividend increases, we do not believe buybacks can persist at historical rates without further leveraging the business. Despite the growing debt balance, however, we assert that Motorola generates sufficient cash flow from operations to meet its obligations going forward under projected conditions, as we model nearly \$1 billion of free cash flow to the company in 2018.

William Fitzsimmons does not own shares in any of the securities mentioned above. Find out about Morningstar's [editorial policies](#).

**sponsored resource center**

From <<http://www.morningstar.com/articles/853544/motorola-dominates-its-missioncritical-niche.html>>