Technology Sector Report

Total Revenue (Bil)	Market Cap (Bil)	Number of Companies	Total Employees	Sector Price/Fair Value	Universe Price/Fair Value
1,492 USD	4,736 USD	139	5,118,121	1.02	1.05

Sector Update

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Sector Update as of 30 June 2015.
Pricing data through 02 July 2015.
Ratings updated as of 02 July 2015.

Currency amounts expressed with "$" are in U.S. dollars (USD) unless otherwise denoted.

Sector Price/Fair Value is the median value of the companies covered by the Morningstar Equity Analysts.

- Foreign exchange will still have an impact on 2015 results, but we haven't seen it affect the tech spending environment all that much; the sector still looks 5% overvalued, and we'd be selective.
- We expect spending on cloud applications to grow nearly 20% annually to reach $62 billion by 2019. Improving sales and marketing efficiency will drive significant operating leverage at many software-as-a-service firms.
- Semiconductor mergers and acquisitions are heating up, with high-profile deals at Intel INTC and Broadcom BRCM.

Despite a modest 2% increase for the S&P 500 through the first half of 2015, it hasn't been a particularly smooth ride for investors. Performance for the technology sector in aggregate has been slightly stronger, up around 3%, but there were areas of strength and weakness. Global currency movements over the past two quarters have resulted in slightly elevated volatility across both the technology and communications-services sectors, but the overall tone from management teams has been fairly positive in terms of the macro environment. In aggregate, we view the tech sector as slightly overvalued and remain selective in our picks.

In our numerous discussions with clients about cloud-applications companies (also referred to as software-as-a-service, or SaaS, companies), we find a wide array of opinions about their long-term profit potential and ability to generate excess returns on capital. The lack of consensus is no surprise—current GAAP operating margins for many firms are extremely low or negative, especially compared with successful on-premises software firms. Blind faith (or its enemy, dogmatic skepticism) has driven the bull (and bear) case for legacy software firms facing the disruptive forces of cloud computing and pure-play cloud providers recording strong revenue growth but paltry profits. We expect spending on cloud applications to grow nearly 20% annually to reach $62 billion by 2019, paced by the customer relationship management segment, which should represent almost half of overall cloud spending.

Improving sales and marketing efficiency will drive significant operating leverage at many SaaS firms. Although they appear to be woeful on a GAAP basis, the cost of maintaining customers should be markedly cheaper than the cost of acquiring them. Even as growth has slowed, we anticipate that SaaS companies may be able to drive sales and marketing costs below 25% of sales in many instances. We also anticipate research and development leverage as products mature and cloud application companies realize the benefit of supporting only one version of each software product. These expenses are currently quite high, depressing cash flow and profitability, but growth in this expense category should slow as products mature and functionality becomes more fully featured. Similarly, SaaS providers with the highest switching costs are unlikely to suffer from price competition, and we expect pricing to increase, even when the industry matures. Currently, on-premises software firms have had the ability to increase pricing for maintenance and support services, and we expect cloud application pricing to follow a similar path. This pricing power is critical as we consider normalized financial models and returns on capital.

Semiconductor mergers and acquisitions are heating up, with high-profile deals at Intel and Broadcom. On June 1, Intel and Altera ALTR confirmed a deal for the

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former to purchase the latter for $54 per share, or approximately $16.7 billion. The agreed-on price represents a 56% premium to where Altera traded before the initial report of a potential deal on March 27 by The Wall Street Journal. We maintain our wide and narrow moat ratings for Intel and Altera, respectively, and expect the deal to clear regulatory hurdles after being approved by both companies' boards.

We view this deal as initially complementary from Intel's perspective. Altera's product portfolio of programmable logic devices is tailored to market segments where Intel does not have a significant presence, such as wireless and wireline communications infrastructure. In a declining personal computer industry, this acquisition provides Intel with additional areas in which to leverage its manufacturing leadership. Recently, Altera has been the main customer for Intel's foundry offerings in 14-nanometer process technology. We believe that by bringing Altera's business in-house, Intel can more optimally use its excess capacity and ultimately realize synergies in research and development that weren't plausible in the preexisting foundry relationship.

On May 28, in conjunction with the release of its fiscal second-quarter results, Avago announced that it has entered into a definitive agreement to acquire Broadcom. Total implied consideration is set at $37 billion, consisting of $17 billion in cash and $20 billion in stock. Management from both companies highlighted areas for potential R&D collaboration that were a bit more optimistic than our expectations. Yet for Avago, we view the deal as much more attractive financially than strategically. Avago will diversify into new products and end markets like TV set-top box, broadband access, and wireless connectivity solutions, but more important is paying a reasonable price for such diversification. In networking, management touted cross-selling opportunities, but we still don't think Avago will unlock significant hidden value in Broadcom's industry-leading networking business. Ultimately, we think our viewpoint is embedded within Avago's long-term financial targets, as 5% average revenue growth doesn't point to extending Broadcom's reach, but a 40% adjusted operating margin target implies hefty cost-cutting (consistent with $750 million in operating expense synergies as announced) and cost savings thereafter.

Perhaps the biggest boost to Broadcom's underlying business from the deal (and, similarly, the biggest source of value unlocked by Avago for buying the firm) is the reduction of Broadcom's customer concentration risk as part of a combined company (which will be named Broadcom Limited, even though Avago is the acquirer in the deal). As part of a combined company with greater size and scale, Broadcom Limited will be better able to weather the storm if its connectivity or broadband segments underperform. Similarly, Avago's purchase premium for Broadcom could look even more attractive, in our view, if the combined firm can mitigate these concentration risks over time.