THE CARLYLE GROUP

GLOBAL ALTERNATIVE ASSET MANAGEMENT

CASE STUDY

How Carlyle Creates Value

Deep industry expertise. Global scale and presence. Extensive network of Operating Executives. And a wealth of investment portfolio data; we call it The Carlyle Edge. These are the four pillars of Carlyle's value creation model. By leveraging these core capabilities and resources—Carlyle has established a 26-year overall track record of investing in companies, working to make them better and serving our investors' needs.





AxleTech International

Industry: Automotive & Transportation

Region/Country: Michigan

Fund: Carlyle Partners IV, L.P.

Acquired: October 2005

Status: Exited



By targeting a fast-growing sector, expanding its range of products and strengthening its management team, AxleTech became a top-selling manufacturer, increased employment and achieved profitable growth.

About AxleTech and the Transaction

Carlyle acquired AxleTech International in October 2005 and exited the investment through a sale to General Dynamics in December 2008. During Carlyle's ownership, AxleTech expanded its capabilities, becoming a top-selling designer and manufacturer of specialty axles, advanced suspension systems and other drivetrain components. The company focused on off-highway, select on-highway and specialty vehicles serving the military sector and the commercial aftermarket. During Carlyle's ownership, AxleTech grew from 450 employees to approximately 900 employees, including 300 unionized employees affiliated with the UAW. While based in Troy, Michigan, AxleTech also operated manufacturing facilities in Oshkosh, Wisconsin; Detroit, Michigan; Chicago, Illinois; St. Etienne, France; and Osasco, Brazil.

Key Value Creation Metrics

- Tripled AxleTech's level of capital spending in new machinery and facility expansion, resulting in a doubling of worldwide production.
- Doubled employment from 450 to nearly 900 between 2005 and 2008.
- Shifted the company's strategy to focus on the fast-growing military sector, becoming the #1 supplier of planetary axles to the U.S. military.
- Expanded product offerings in the commercial aftermarket, generating a 30% increase in annual aftermarket revenue and a more than 180% increase in EBITDA from 2005 through 2008.
- Enhanced senior management by partnering with CEO Mary Petrovich to improve key positions and by providing an equity incentive plan for executives.

#1 supplier

With Carlyle's assistance, AxleTech shifted its focus on the fast-growing military market, becoming the #1 supplier of planetary axles to the U.S. military and a key supplier to a growing global market.

ABOUT THE CARLYLE GROUP

The Carlyle Group (NASDAQ: CG) is a global alternative asset manager with \$185 billion of assets under management across 122 funds and 81 fund of funds vehicles as of September 30, 2013. Carlyle's purpose is to invest wisely and create value on behalf of its investors, many of whom are public pensions. Carlyle invests across four segments - Corporate Private Equity, Real Assets, Global Market Strategies and Solutions - in Africa, Asia, Australia, Europe, the Middle East, North America and South America. Carlyle has expertise in various industries, including: aerospace, defense & government services, consumer & retail, energy, financial services, healthcare, industrial, technology & business services, telecommunications & media and transportation. The Carlyle Group employs more than 1,450 people in 34 offices across six continents.

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Positioning the Business for Future Growth

Working with Carlyle, CEO Mary Petrovich and AxleTech's management team successfully expanded the company's focus on the military market and the commercial aftermarket, while significantly increasing capital investment and successfully executing three add-on acquisitions. This resulted in a doubling of worldwide production capacity from 2,300 to 4,600 axles per month.

With Carlyle's strategic assistance, AxleTech focused its development efforts on the fast-growing military sector. The company targeted its heavy-duty axle and suspension systems to military vehicle manufacturers building heavy-armored vehicles for American soldiers in Iraq and Afghanistan. As a result, the company implemented 49 development programs for new products. At the time of the sale to General Dynamics, AxleTech had become the #1 supplier of planetary axles to the U.S. military and a key supplier to a growing global market.

AxleTech also expanded its range of offerings in the commercial aftermarket by forging strategic relationships to develop its customer base, expanding the number of replacement parts available to customers and aggressively entering the commercial on-highway market. Through these efforts and Carlyle's support, the company generated annual aftermarket revenue growth of 30% from 2005 through 2008.

In addition, Carlyle worked with AxleTech to strengthen the company's management team and enhance the company's financial reporting capabilities. AxleTech upgraded a number of key senior executive positions and created more than 30 new management roles to help shape and execute the company's growth strategy. An equity incentive plan also was implemented to better align the interests of owners and employees.

The leadership team grew the top line and improved AxleTech's cost structure through purchasing and engineering cost reduction projects. AxleTech also implemented a number of new financial controls and processes to improve management's reporting capability and to better track and manage customer profitability and cash flow generation.

