Metals and Metals Processing

Perspective: Page 4

Metals companies are navigating a challenging operating environment as overcapacity, slower global growth, and soft demand have put pressure on margins. Despite these obstacles, the M&A market is off to a healthy start in 2016, evidenced by a strong level of inquiries from buyers and sellers. What remains to be seen is whether buyer and seller value expectations will be aligned.

While lenders are exhibiting heightened caution in the current cycle, the credit markets continue to remain open. Andy Pappas, Head of the ABL Metals Group at BMO Harris Bank, discusses how asset based lenders are helping guide companies through this difficult period, sharing insight on industry dynamics, consolidation trends, and the rapidly-changing marketplace for metals suppliers.

March 2016
Brown Gibbons Lang & Company

Chicago
One Magnificent Mile
980 N. Michigan Avenue
Suite 1880
Chicago, IL 60611

Cleveland
One Cleveland Center
1375 East 9th Street
Suite 2500
Cleveland, OH 44114

bglco.com

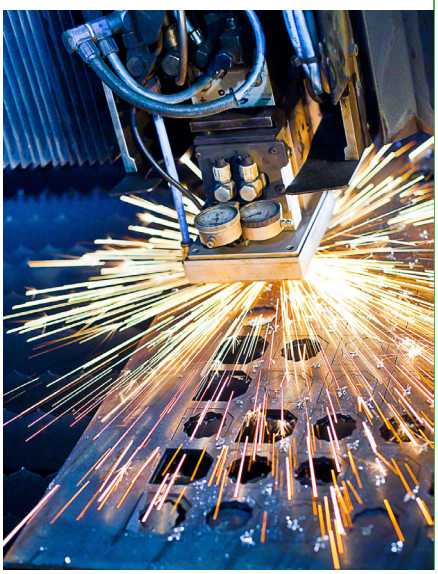
The BGL Metals Insider is published by Brown Gibbons Lang & Company, a leading independent investment bank serving middle market companies throughout the U.S. and internationally.

M&A Activity

- The Metals M&A market is off to a healthy start in 2016, evidenced by a strong level of inquiries from both buyers and sellers. We have been actively approached by several large public companies that are actively looking for new platforms and complementary acquisitions to better position themselves for stronger markets in the future, and perhaps even more important, demonstrate growth to equity investors and analysts. This sentiment is driven by a stable near-term outlook for the economy and the need for acquisition-driven growth. Given the slow growth economy, many private company owners are not anticipating significant value appreciation in their businesses, and in the current difficult operating environment, are more motivated to consider an exit.
- Headline deals in metals include Berkshire Hathaway's purchase of Precision Castparts, completed this January, and Alcoa's transformative acquisition of RTI International Metals last July. Fabricators saw a healthy level of deal flow with aerospace among the active end markets, including Precision Castparts' purchase of Noranco in October and Composite Horizons in July, in addition to Liberty Hall's July acquisition of LaCroix Industries, its third buy for platform Accurus Aerospace Corporation. Service centers continue to consolidate, with Reliance Steel & Aluminum, Klöckner & Co, and Ryerson Holding Corporation each reporting acquisitions.

Financing Activity

- The Metals lending market has seen many borrowers shift to asset based lending (ABL) arrangements. Some with existing ABL facilities have found themselves overlevered as lenders have reexamined inventory values, with the decline in commodity prices causing many borrowers to be out of compliance. This will lead to further distressed sale activity driven by the banks. We are expecting the volume of bank-driven M&A activity in 2016 to exceed 2009 levels. The difference will be a significantly greater number of interested buyers in this cycle. Banks will now see a viable M&A solution to challenged credits.
- M&A comprised 25 percent of middle market lending in 2015 and is expected to lead 1Q16 activity, according to Thomson Reuters LPC's *1Q16 Middle Market Investor Outlook Survey*. Surveyed bank and non-bank lenders revealed a lower leverage tolerance with pricing likely to tick up in 1Q16 with many reporting higher minimum spread thresholds. The outlook on the economy is mixed with growth expected to be uneven and sector specific. Nearly 30 percent of respondents believe financial performance could deteriorate in 2016 with a pick-up in defaults.
- Commodity volatility has reduced lender risk appetite in the Metals sector. Businesses that have contracts to hedge commodity exposure have performed well and can still access a healthy lending market. As previously stated, limited organic growth opportunities will drive selective strategic acquisitions to meet shareholder expectations.



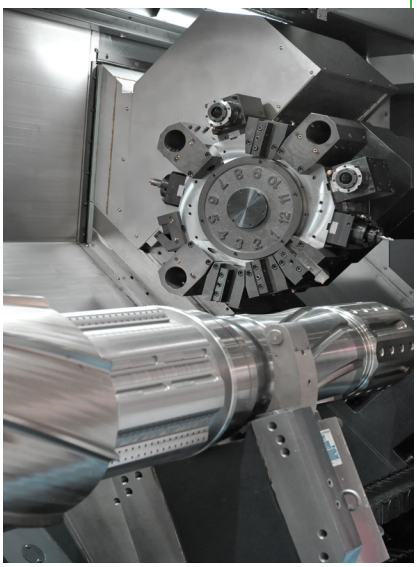
Industry Valuations

- Valuation multiples in the Metals sector are under competing pressures. The need for acquisition-driven growth among public buyers is keeping M&A multiples healthy. Conversely, downward pressure is being created from distressed deals in the market that are trading at asset value. Buyers are weighing the relative value of acquiring a distressed asset versus a healthy business that will not require as much management time.

Operating Highlights

- Metals companies anticipate challenges to persist in 2016. Overcapacity and rising imports (fueled by a strong dollar) that largely accommodated demand growth contributed to a weak pricing environment in 2015. Tepid demand fundamentals are setting up for a sluggish first half of 2016.
- Year-to-date steel production through February* was 13.1 million tons, down 7.4 percent from the same period a year ago, at a capability utilization of 69.2 percent (down from 74.4 percent).
- January service center shipments declined to 3.05 million tons, a 13.3 percent decrease from the same period a year ago, marking the 13th consecutive decline on a year-on-year basis. Inventories declined 20.1 percent to 7.95 million tons (2.6 months supply) from 9.96 million tons. Industry participants are keeping a close watch on demand fundamentals to gauge confidence to build inventories.
- Aerospace, construction, and automotive remain bright spots and are expected to drive growth in 2016. The energy market continues to remain challenged with reduced drilling activity and the continued weak pricing environment.

*As of February 20, 2016.



For more information on how BGL's Global Metals Practice can assist your company, please contact:

Vincent J. Pappalardo
Managing Director
Head: Metals and Metals Processing
312.658.4772

vpappalardo@bglco.com

Perspective:

Q&A with Andy Pappas, ABL Metals Group Head of BMO Harris Bank

BMO Harris Bank

BMO Harris Bank's Metals team provides relationship-focused, commercial banking services to mid-and large-cap companies across all major market segments. Product offerings include asset based lending (ABL), cash flow financing, equipment finance financing, hedging lines, foreign exchange lines, and other products/services. The ABL Group manages more than 200 clients with total commitments exceeding $9 billion in North America with over 40% in Metals/ Industrials.

Andrew Pappas is a Managing Director and heads the ABL Metals Group, a team of nine business development and portfolio management professionals focused on sourcing, structuring, and managing senior secured credit facilities as part of a corporate finance solution, primarily for metals and industrial companies.

"I don't see a threat of a recession in the near-term. The near-term outlook on the economy is stable, even if there is more disruption with China."

What are some of the critical challenges/issues facing the metals industry?

The industry has come under increased scrutiny due to trends in metals prices and their impact to operating margins. Headwinds, notably slowing activity in China, the strong dollar, and supply/demand dynamics, all have had a negative impact on company operating performance.

Imports continue to be a big issue. The impact that trade cases will have on import volumes and pricing is unclear.

There is heightened focus on preserving vendor relationships.

What is your near-term outlook on the economy?

I don't see a threat of a recession in the near-term. The near-term outlook on the economy is stable, even if there is more disruption with China. Many of our middle market borrowers, while they may be sourcing overseas, are domestically focused. They are selling into North America so they are performing a little bit better.

The energy crisis is actually benefiting some manufacturers. Lower energy prices are improving their cost structure.

What is your near-term outlook on pricing?

Visibility is limited. Over the last 18 months, we have seen periods where prices appear to stabilize, but any increases fail to stick because of the supply and demand imbalance. Excess supply is continuing to drive prices down.

Metals prices haven't reached a bottom. There is probably more downside risk because of the supply and demand imbalance, which will continue to make it more challenging. You could see prices decline over the next six to nine months. At the end of the day, there needs to be more distress and some capacity taken out of the market to see some stabilization.

What is your near-term outlook on end market demand?

End market demand is stable. Aerospace has probably seen the most growth given projected demand for aircraft, particularly from the emerging economies. Automotive has been a consistent business for many metal suppliers. Auto production in North America may be close to reaching a peak, but I don't expect demand to fall off particularly given the average age of vehicles on the road. Construction was slower to rebound but is now seeing increased activity.

Companies are focusing on their core end markets. If they are heavily invested in automotive, they are trying to solidify their customer relationships and lock into multi-year platforms. Companies with a significant concentration in oil and gas are looking to reduce their exposure. Some are exiting the sector.

How are companies performing in the current environment?

Metals companies are hunkered down. They know this is the worst environment they've ever seen—worse than the 2008/2009 time period for many of them. They are conserving cash and have cut capex levels pretty dramatically. They are trying to adjust their business models and take costs out where they can because of the uncertain future.

Middle market companies have made a number of operational improvements. They've reduced inventory levels and improved their inventory turns. Some have consolidated facilities. They have rationalized SKUs, exited unprofitable customer relationships, and reduced headcount, in some cases by 30 to 40 percent. Some (not many) have been hedging.

There will always be costs to cut, but at some point you start digging into the bone. Some companies are at their limit and to survive will either have to support the business with additional capital or bring in a partner to help weather the storm.

What are some of the primary concerns that lenders have with metals companies in the current environment?

The two primary concerns for a lender looking at a metals company today are, does the business have enough liquidity to operate, and is it generating enough cash to cover fixed charges. For a number of metals companies, earnings have declined significantly and debt levels are higher. Do owners have the resources needed to support the company if a negative trend continues?

Liquidity is tighter today than ever before. The challenge will be when the market improves; a lot of these companies that are overlevered are not going to have the liquidity to grow. Some will need additional capital to support the business, maybe by bringing in other investors, or will look to sell.

"The challenge will be when the market improves; a lot of these companies that are overlevered are not going to have the liquidity to grow. Some will need additional capital to support the business, maybe by bringing in other investors, or will look to sell."

What do you see as the challenges and opportunities from a financing perspective?

Today, lenders have to be creative to come up with a solution that adds value to a company. In some cases, we've increased our advance rates, lent on certain assets that were not in the borrowing base before, provided more flexibility in the covenant structure, or revisited how inventory is valued to provide additional liquidity. It comes down to the strength of the management team and their level of commitment to the business.

Perspective:

Q&A with Andy Pappas, ABL Metals Group Head of BMO Harris Bank

The lender wants to find a solution to support a viable business and good customer relationship—but it's a two-way street. Lenders are operating in a regulated environment and need to find a solution that meets everyone's needs— client, bank, and external regulators.

We are seeing some pressure on covenants. For lenders, those situations can present refinancing opportunities. A number of credit facilities have moved to asset based structures where there is a working capital facility and at most one covenant, which is a fixed charge covenant.

It is critical to begin discussions early with your lender to understand the causes for performance problems or liquidity issues and to address any potential financial covenant/availability issues on a real-time basis.

Is the role of the "relationship lender" more meaningful today?

The role of the relationship lender has taken on even greater importance in the current environment. Companies need to partner with a lender that understands the volatility associated with the industry and is willing to work with them through challenging periods.

"The role of the relationship lender has taken on even greater importance in the current environment. Companies need to partner with a lender that understands the volatility associated with the industry and is willing to work with them through challenging periods."

For a lender with an interest in staying in the metals space, it is a good time to cautiously take some risks where appropriate. It is an environment where bank credit groups can be more vocal. BMO Harris Bank has deep ties and commitments to the metals industry. We have been gradually growing our market share by adding new customers as lenders have exited, in some cases 20-, 30-year relationships. In our view, if you help a company find a solution now, you are going to be their lender for a long time. We are up to that challenge, and we are trying to provide more creative solutions that add value to our customers.

Please comment on trends in pricing and leverage

Pricing is dependent on the credit profile. Competitive dynamics in the broader ABL market have driven pricing below L+200 for quality credits. We are seeing a firming of spreads on metals facilities with a 25-50 basis point upward bias due to current market conditions. It becomes more about flexibility in structure (e.g., higher advance rates, flexibility in covenant structure) and who you want as your partner going forward. Ultimately, it depends on how many lenders you need to get a deal done. Often the last lender in the deal can dictate terms.

Metals companies that are providing more value–added services are able to charge a higher premium, and if they are hedging, they are profitable even in this environment. Those companies are going to receive a better interest rate package from lenders.

Total leverage is increasingly being scrutinized by bank credit groups and regulators. Cash flow declines are forcing leverage to higher levels. There are concerns on meeting financial covenants—fixed charge coverage test or other covenants (i.e., tangible net worth, minimum EBITDA, leverage). It is forcing certain ABL lenders not in the metals space to exit the industry.

Have you observed any significant changes in either action or mood of lenders?

There is more revolver-driven debt being provided by ABL lenders in the form of working capital lines.

ABL lenders are reducing their term exposure on metals deals which is reflective of the tightening credit profile. Maturity dates have tightened, in some cases, from five years to three year deals.

Advance rates on inventory are 85-90 percent of net orderly liquidation values for inventory. We have seen lenders ratchet back advance rates by 5 or 10 percent because they perceive metals companies to be tougher credits.

What is your outlook on credit availability?

There is no shortage of competition. We might see two to four lenders competing on every deal. However, there are fewer capital providers lending into the metals industry which has led to some stabilization in pricing.

I don't anticipate credit tightening more unless there are bankruptcies and lenders take significant write offs. There are a handful of lenders that are hunkered down, and in certain situations, what they are doing today is all they can do. I see it in borrowing bases where availability is very tight.

"Companies in a stronger liquidity position might view the current market as a buying opportunity but are using whatever cash they have cautiously."

What impact will consolidation have on the industry going forward?

Companies in a stronger liquidity position might view the current market as a buying opportunity but are using whatever cash they have cautiously.

The bulk of consolidation this year is going to come from distressed situations, particularly in the service center and scrap markets. We are now starting to see some bankruptcies involving public and private companies, and as long as this environment remains challenging, I think there will be more.

Perspective:

Q&A with Andy Pappas, ABL Metals Group Head of BMO Harris Bank

Some of the larger players have moved away from commodity metals and into fabrication through acquisitions. Alcoa recently announced it is separating its value-add and upstream businesses into two companies to improve returns to shareholders. There will be some consolidation as companies look to move down market into higher value-added products and services.

Some operators are going to require additional capital to grow. There might be more situations where a business owner brings in a partner in a minority recapitalization. Private equity can really fill that void.

Observations on valuation trends you are seeing in the marketplace

Valuations are flat to down. A company that is providing more of a value-added product or service and generating higher EBITDA margins will be able to attract a reasonable valuation. Commodity-driven businesses are trading at net book value.

This is an environment where companies really need sound advice from a trusted advisor. Many wait and become indecisive which is never a benefit.

"There will be some consolidation as companies look to move down market into higher value-added products and services."

Andy Pappas heads the Metals vertical within the Asset Based Lending Group of BMO Harris Bank where he is responsible for managing over $2 billion in commitments primarily for metals and industrial companies throughout the United States. Andy has been responsible for sourcing and funding over $4 billion in commitments over his 20+ year banking career, having held positions at MFC Capital Funding where he sourced senior debt and equity co-investments, primarily for private equity based deals, and Bank of America Business Capital (and predecessor companies such as Fleet Capital) where he primarily focused in new business development within the industrials sector. He spent his early career in public accounting as a CPA with KPMG. Andy received a B.A. in Accounting from Loyola University of Chicago and an M.B.A. in Finance from New York University. For further information, please contact Andy at (312) 461-7880 or andrew.pappas@bmo.com.

Notable M&A Activity in Service Centers

SERVICE CENTERS

In January 2016, **Reliance Steel & Aluminum** (NYSE: RS) completed the acquisition of **Tubular Steel, Inc.** (TSI). Founded in 1953 and headquartered in St. Louis, Missouri, TSI is a distributor and processor of carbon, alloy, and stainless steel pipe, tubing, and bar products with seven service center locations across the United States. TSI also operates a fabrication business located in the St. Louis area that supports its diverse customer base. TSI's net sales were approximately $200 million in 2014. TSI is the first acquisition for Reliance since the December 2014 purchase of Fox Metals and Alloys.

In November 2015, **Hitachi Metals America** acquired **Diehl Tool Steel**, a supplier of tool steel, alloy steel, CPM® powder metal, mold steel, carbon steel, stainless steel, and aluminum products and services. Tom Bell, Product Group Head of Hitachi Metals America, LLC commented, "This acquisition greatly enhances our presence in North America, and will accelerate our plans to expand the capabilities we have to offer customers at Hitachi Metals."

In October 2015, **Klöckner & Co SE** (XTRA: KCO), through its U.S. subsidiary Kloeckner Metals Corporation, acquired **American Fabricators**, a Nashville, Tennessee-based sheet metal fabricator of complex parts for customers in diverse industries, including HVAC, transportation, and energy distribution. The company employs approximately 150 people and reported annual sales of $30 million.

With the acquisition, Klöckner furthers its strategy to expand into value-added fabrication in the southeast U.S. "Having expanded our service center activities in the U.S. to a significant degree, we are now entering the higher value-added segment of sheet metal fabrication. This means that through greater integration into our customers' production processes, we will be participating more and more from value creation in the manufacturing of complex sheet metal components, said Klöckner CEO Gisbert Rühl, commenting on the transaction. "The process expertise gained can also be channeled into creating value in other regions of the U.S. and even at European locations."

In August 2015, **Ryerson Holding Corporation** (NYSE: RYI) acquired **Southern Tool Steel** (STS). Headquartered in Chattanooga, Tennessee, STS is a privately-owned metals service center company specializing in bar and plate processing, as well as grinding capabilities. The company has two locations and employs approximately 90 people. STS serves machine, tool and die shops, energy providers, automotive manufacturers, appliance manufacturers, and aerospace parts manufacturers located in the southeastern United States. "STS brings extensive bar and plate processing capabilities to Ryerson, consistent with our focus on long products and value-added services," said Ryerson CEO Eddie Lehner. "Moreover, like our acquisition of Fay Industries announced in January 2015, we are joined by a company in STS that creates exceptional customer experiences in the southern U.S. market."

FABRICATORS

In January 2016, **Berkshire Hathaway** (NYSE: BRK.A) completed the acquisition of **Precision Castparts** (NYSE: PCP) in a $36.9 billion transaction. Precision Castparts (PCC) is a global manufacturer of complex metal components and products for the aerospace, power, and general industrial markets. The company manufactures complex structural investment castings and forged components for aerospace markets, machined airframe components, and highly engineered, critical fasteners for aerospace applications, and in manufacturing airfoil castings for the aerospace and industrial gas turbine markets. PCC also produces titanium and nickel superalloy melted and mill products for the aerospace, chemical processing, oil and gas, and pollution control industries, and manufactures extruded seamless pipe, fittings, and forgings for power generation and oil and gas applications. **Transaction Multiples: 3.8x Revenue and 14.8x EBITDA.**

PCC completed a number of acquisitions in 2015, including **Noranco** in October and **Composite Horizons** in July.

In October 2015, **Precision Castparts** acquired **Noranco** from **MidOcean Partners** and **PSP Investments** in an all-cash transaction valued at $560 million. Noranco supplies complex machined and fabricated components for aero-engine, landing gear, and airframe applications. The company serves leading aerospace OEM and Tier 1 manufacturers, including Honeywell, UTAS, Safran, Bombardier, and Spirit, and has strong content positions on the next generation commercial platforms including 737, 787, 777, A350, and A320. Noranco employs 1,100 employees across 8 manufacturing sites in North America. "Noranco's aerostructures business strengthens our existing

SOURCE: S&P Capital IQ, PitchBook, Equity Research, Company Filings, and public data.

Notable M&A Activity in Fabricators

market position in airframe products, and their engine, landing gear, and machining capability will expand our product offering on current and next generation aircraft," said Precision Castparts CEO Mark Donegan. "By utilizing our current operations to supply forgings and fasteners to Noranco, PCC becomes an even more competitive force among aerospace manufacturers. Together, PCC and Noranco will leverage our technical talent and operational expertise to strengthen our position as the preeminent supplier of the most complex and critical components to the aerospace industry."

MidOcean Partners reportedly generated a 2.2x return on the sale. During its ownership, Noranco completed two add-on acquisitions, Procesos Termicos in November 2014, and Arnold Engineering in December 2013, purchased from HKW Capital Partners. Procesos Termicos marked Noranco's formal entry into Mexico. The company is a supplier of precision machining, sheet metal, hydro forming, special processing, and heat treat processes to the aerospace industry, serving a customer base that includes Boeing and UTC, among other top tier aerospace industry clientele. Arnold Engineering is a supplier of large complex machined structures and assemblies from aluminum and titanium alloys. The company is a long term supplier partner to Boeing, Triumph, Spirit, Lockheed Martin, and Northrop Grumman. "Our successful investment in Noranco is a perfect example of MidOcean's strategy to back strong management teams who leverage our operating resources to drive growth and operating efficiency," commented MidOcean CEO Ted Virtue. "Noranco has been a terrific platform to consolidate the highly fragmented aerospace sector and this is a great outcome for our investors."

In July 2015, **Precision Castparts** acquired **Composites Horizons** (CHI) from **American Industrial Partners**. Based in Covina, California, Composites Horizons supplies high temperature carbon and ceramic composite components, including ceramic matrix composites (CMC), for use in next-generation aerospace engines. CHI's performance-critical components offer exceptional strength and high-temperature tolerance, allowing aircraft engines to operate with higher fuel efficiency and lower emissions. The company has positions across the key next-generation commercial platforms, including A320neo, 737 MAX, 777X, 787, and A350 XWB. "Driven by their temperature and weight capabilities, the demand for composite and CMC components in aircraft engines is expected to expand over the next decade," said Precision Castparts CEO Mark Donegan. "With capability across multiple classes of CMCs and composites, and with multi-year relationships with all the engine OEMs, CHI is in a strong position to capitalize on growth opportunities. In combination with CHI, PCC is now able to offer our engine customers a range of metallic and CMC material capability to meet any requirement. We will work with CHI's experienced management team and employees to leverage their advanced technical expertise, proprietary process knowledge, and specialized assets to grow business with existing customers and secure positions on new platforms. We are confident that CHI's culture of innovation and proven ability to scale will strengthen PCC's position as a strategic technology partner to all major aero-engine manufacturers."

In January 2016, **Blackford Capital** completed the acquisition of **Quality Aluminum Products**, a maker of siding, gutters, roof edging and other exterior products for the residential housing industry. Quality Aluminum employs 80 people from production facilities in Hastings and Flat Rock, Michigan and specializes in lower-volume runs producing specialized products. Quality Aluminum sells to contractors and suppliers in states around the Midwest. Blackford Capital has plans to expand the company's market into states in the Plains, Southeast, and Mid-Atlantic regions. "It would be our desire to take them national," said Blackford Capital Managing Director Martin Stein. The company has achieved rapid growth, averaging a 20-percent growth rate the last few years, with sales approaching $50 million, according to Stein.

In December 2015, **Dynacast International Ltd.** acquired **Tek-Cast / MH Machining** located in Bensenville, Illinois. The acquisition will expand its zinc and aluminum castings capacity and machining depth in North America. Dynacast CEO Simon Newman called the acquisition "the first step of many more to come over the next year or two". According to a company statement, Dynacast aims to grow to a $1.5 - $2.0 billion organization over the next three to five years with support from financial backers **Partners Group** and **Kenner & Company**, which acquired a controlling interest in the company in January 2015. "The acquisition is an excellent strategic move in the realization of this vision and furthers Dynacast's

SOURCE: S&P Capital IQ, PitchBook, Equity Research, Company Filings, and public data.

Notable M&A Activity in Fabricators

position as the foremost global manufacturer of precision metal components." Headquartered in Charlotte, North Carolina, Dynacast produces precision engineered metal components utilizing both die casting and metal injection molding (MIM) for customers in diverse industries including automotive, telecommunications, and healthcare. The company operates 23 facilities in 16 countries.

In December 2015, **Madison Industries** purchased several non-core businesses related to certain castings, steel-plate fabrication, and deburring operations of **Kennametal** (NYSE: KMT) for a purchase price of $70 million. The divestitures are in connection with Kennametal's portfolio simplification strategy which includes plans to reduce its manufacturing footprint by 20-25 percent.

In September 2015, **Resilience Capital Partners** completed the acquisition of **Porter's Group**. Headquartered in Bessemer City, North Carolina, Porter's is a leading provider of metal fabrication solutions serving the security, military, mining, heavy equipment, and trucking industries. The company is also the largest metal fabricator of ATMs in North America. Porter's employs approximately 470 people from four production facilities. Ki Mixon, a Partner at Resilience, said, "With its wide range of capabilities, Porter's differentiates itself from its competitors and is uniquely positioned for future growth alongside our blue-chip customer base."

In August 2015, **Hynes Industries** acquired **American Roll Formed Products**, a full-service, custom metal fabricator serving regional firms, Fortune 50 companies, and major OEMs in diverse industries, from construction and transportation to the energy sector. The company operates three manufacturing facilities in Painesville, Ohio and North Las Vegas, Nevada. Hynes CEO Greg Gyllstrom commented on the transaction, "We are pleased to have the ARF team join the Hynes family. They bring new markets, valuable expertise, additional manufacturing capacity plus a manufacturing and commercial presence on the West Coast. Our commitment to our customers is redoubled as we serve them with Absolute Reliability." Hynes Industries is a portfolio company of **Resilience Capital Partners**, which it acquired in a recapitalization in August 2014. Brown Gibbons Lang advised Hynes in the transaction.

In July 2015, **Liberty Hall Capital Partners**, acquired **LaCroix Industries**. Founded in 1977, LaCroix is a Tier II supplier of complex metallic formed and machined parts and assemblies for the global aerospace industry. LaCroix will be integrated into **Accurus Aerospace Corporation**, Liberty Hall's aerospace platform formed in November 2013 with the acquisition of Precise Machining & Manufacturing and subsequent add-on acquisition of McCann Aerospace Machining in March 2014. LaCroix supplies several Boeing commercial aerospace platforms, including the 737, 777, and 787. The acquisition expands Accurus's content on these platforms and extends its geographic reach into the Pacific Northwest, "...the core aerospace supply region in the United States". "The strategic acquisition of LaCroix provides Accurus with new high-precision sheet metal forming and complementary machining capabilities, expands our relationship with The Boeing Company, and extends Accurus's geographic presence," said Rowan Taylor, Liberty Hall's founding Partner. "In its nearly 40-year history, LaCroix has built a reputation for providing customers with complex formed and machined parts while achieving impeccable quality and delivery standards. The addition of LaCroix marks the third acquisition for Accurus, as we continue to execute our strategy to build a leading, fully capable, diversified Tier II aerostructures supplier."

In July 2015, **The Watermill Group** acquired **Quality Metalcraft** (QMC). QMC is a producer of engineered structural metal components and assemblies to automotive and other specialty vehicle industries. Capabilities that include advanced tooling, robotic flexible manufacturing lines, and a recent investment in automated stamping have enabled the company to forge relationships with leading OEMs and Tier-1 suppliers in diverse industries. QMC has differentiated itself in the automotive industry with a focus on prototyping and by providing low-to-medium volume production solutions for automakers' niche, derivative, and limited-edition vehicles. QMC is one of a few suppliers capable of delivering full body-in-white prototypes used in crash testing and other safety and design evaluation programs. "In the last decade, QMC has built the platform and infrastructure for dramatic growth, through strategic hires and focused investments in robotics, automation, and engineering," stated Kurt Saldana, CEO of QMC. "We're eager to bolster that growth with Watermill's support, and to continue to deliver the products and services that our market-leading customers value so greatly."

SOURCE: S&P Capital IQ, PitchBook, Equity Research, Company Filings, and public data.

Metals M&A Activity

Notable M&A Activity in Specialty Metals and Recycling

SPECIALTY METALS

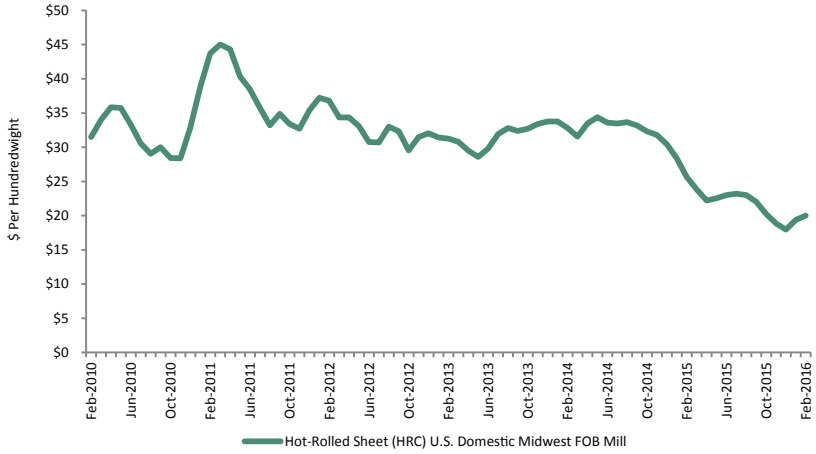
In July 2015, **Alcoa** (NYSE: AA) completed the acquisition of **RTI International Metals** (NYSE: RTI) in an all-stock transaction valued at $1.1 billion. The transformative acquisition further transitions Alcoa toward higher value products. RTI is a strong proven midstream and downstream titanium aerospace player with midstream operations spanning melting, ingot casting, plate/sheet production, and downstream operations in extrusions, high speed machining, and sub-assembly production. The acquisition increases Alcoa's aerospace revenues by 13 percent and grows aerospace exposure to 37 percent of value-added revenues. RTI revenue is expected to grow 50 percent and EBITDA by over 100 percent by 2019, according to Alcoa. Alcoa is also anticipating about $100 million in synergies by 2019 through productivity improvements, procurement savings, and overhead cost reductions. The transaction follows the acquisitions of Tital in March 2015 and Firth Rixon in November 2014 ($3.0 billion purchase price, ~3.0x Revenue and ~12.8x EBITDA). Combined with its own $5 billion (+) aerospace vertical, Alcoa strategically integrates its titanium capabilities, positioning it as a formidable titanium player at a time when aerospace OEMs are favoring scale/vertical integration. **Transaction Multiples: 1.3 Revenue and 8.1x EBITDA**

RECYCLING

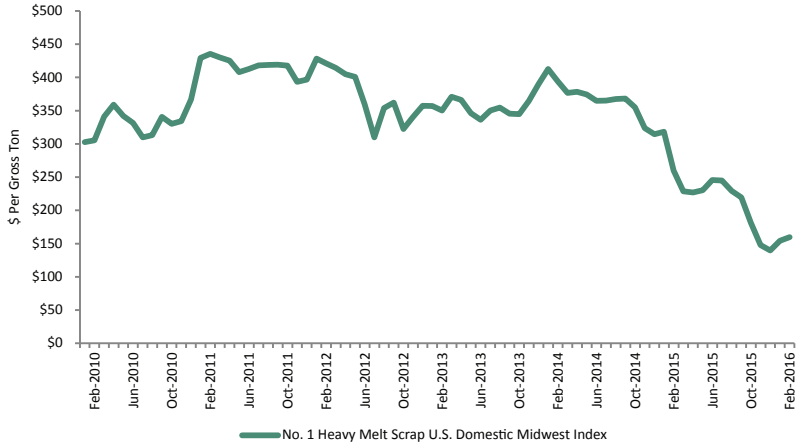
In September 2015, **Total Merchant LTD**, a company controlled by Chung Sheng Huang, the chairman of the board and managing director of China-based secondary aluminum producer **Ye Chiu Group**, acquired **Metalico** in a take-private transaction for approximately $107 million. Metalico operates ferrous and nonferrous facilities, including three auto shredders, in New York, Pennsylvania, Ohio, West Virginia, New Jersey, and Mississippi. Company officials say the "new" Metalico is "looking forward to getting back to work as a preeminent scrap metal recycler with a focus on quality customer service," and that the company "will continue to operate under its current management." **Transaction Multiples: 0.2x Revenue and 14.5x EBITDA**

SOURCE: S&P Capital IQ, PitchBook, Equity Research, Company Filings, and public data.

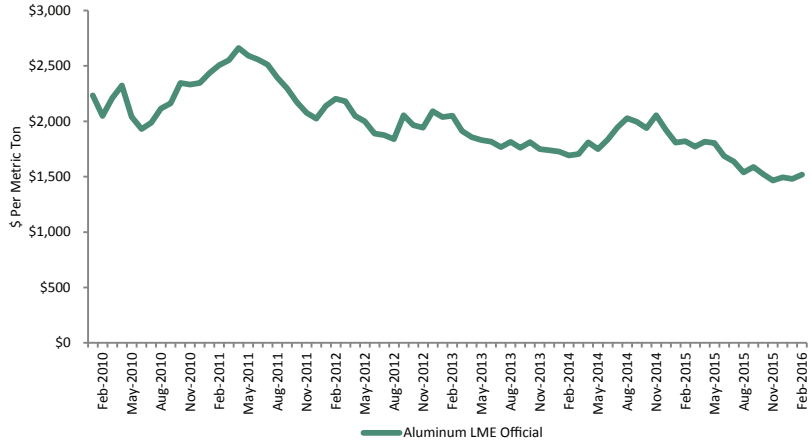
Hot Rolled Sheet



No. 1 Heavy Melt



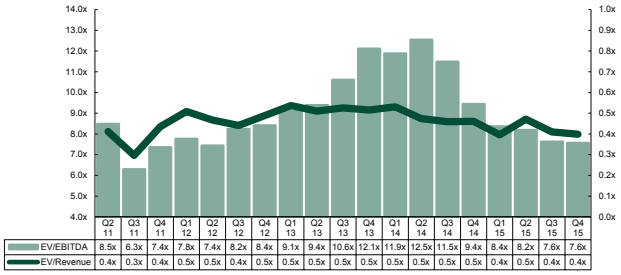
LME Aluminum



SOURCE: AMM.

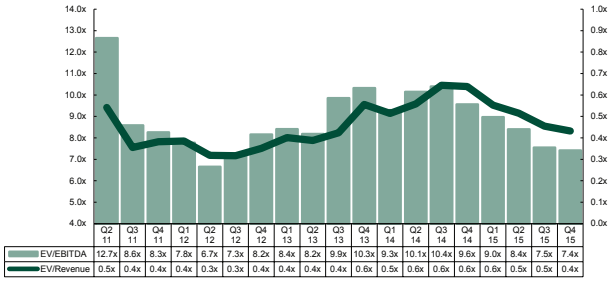
Relative Valuation Trends

Service Centers



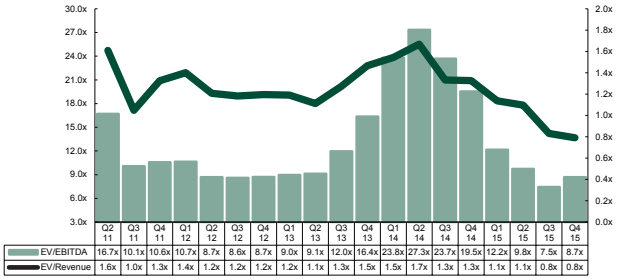
	Q2 11	Q3 11	Q4 11	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13	Q3 13	Q4 13	Q1 14	Q2 14	Q3 14	Q4 14	Q1 15	Q2 15	Q3 15	Q4 15
EV/EBITDA	8.5x	6.3x	7.4x	7.8x	7.4x	8.2x	8.4x	9.1x	9.4x	10.6x	12.1x	11.9x	12.5x	11.5x	9.4x	8.4x	8.2x	7.6x	7.6x
EV/Revenue	0.4x	0.3x	0.4x	0.5x	0.5x	0.4x	0.5x	0.5x	0.5x	0.5x	0.5x	0.5x	0.5x	0.5x	0.5x	0.4x	0.5x	0.4x	0.4x

Integrated/Mills



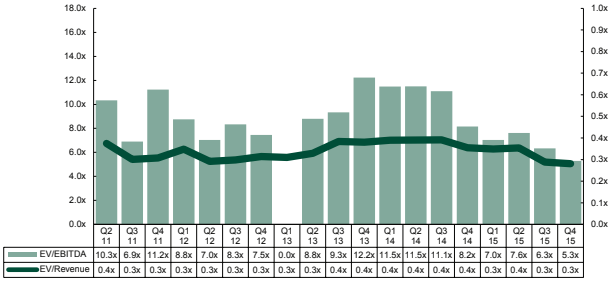
	Q2 11	Q3 11	Q4 11	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13	Q3 13	Q4 13	Q1 14	Q2 14	Q3 14	Q4 14	Q1 15	Q2 15	Q3 15	Q4 15
EV/EBITDA	12.7x	8.6x	8.3x	7.8x	6.7x	7.3x	8.2x	8.4x	8.2x	9.9x	10.3x	9.3x	10.1x	10.4x	9.6x	9.0x	8.4x	7.5x	7.4x
EV/Revenue	0.5x	0.4x	0.4x	0.4x	0.3x	0.3x	0.4x	0.4x	0.4x	0.4x	0.6x	0.5x	0.6x	0.6x	0.6x	0.6x	0.5x	0.5x	0.4x

Specialty Metals



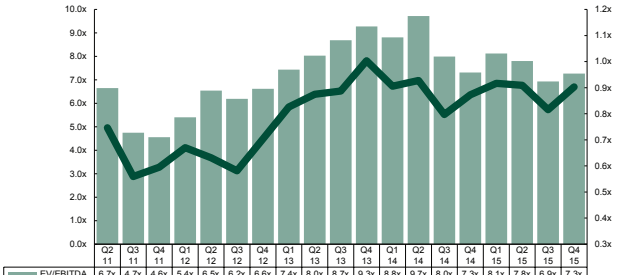
	Q2 11	Q3 11	Q4 11	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13	Q3 13	Q4 13	Q1 14	Q2 14	Q3 14	Q4 14	Q1 15	Q2 15	Q3 15	Q4 15
EV/EBITDA	16.7x	10.1x	10.6x	10.7x	8.7x	8.6x	8.7x	9.0x	9.1x	12.0x	16.4x	23.8x	27.3x	23.7x	19.5x	12.2x	9.8x	7.5x	8.7x
EV/Revenue	1.6x	1.0x	1.3x	1.4x	1.2x	1.2x	1.2x	1.2x	1.1x	1.3x	1.5x	1.5x	1.7x	1.3x	1.3x	1.1x	1.1x	0.8x	0.8x

Scrap



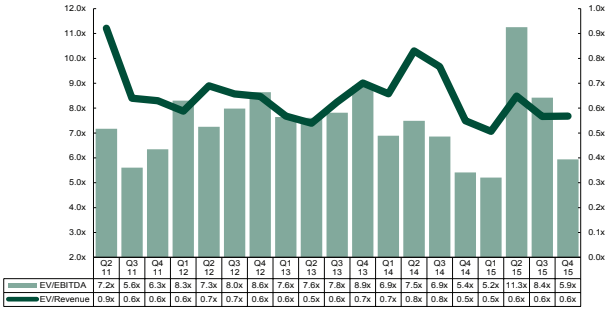
	Q2 11	Q3 11	Q4 11	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13	Q3 13	Q4 13	Q1 14	Q2 14	Q3 14	Q4 14	Q1 15	Q2 15	Q3 15	Q4 15
EV/EBITDA	10.3x	6.9x	11.2x	8.8x	7.0x	8.3x	7.5x	0.0x	8.8x	9.3x	12.2x	11.5x	11.5x	11.1x	8.2x	7.0x	7.6x	6.3x	5.3x
EV/Revenue	0.4x	0.3x	0.3x	0.3x	0.3x	0.3x	0.3x	0.3x	0.3x	0.4x	0.4x	0.4x	0.4x	0.4x	0.4x	0.3x	0.4x	0.3x	0.3x

Fabricators



	Q2 11	Q3 11	Q4 11	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13	Q3 13	Q4 13	Q1 14	Q2 14	Q3 14	Q4 14	Q1 15	Q2 15	Q3 15	Q4 15
EV/EBITDA	6.7x	4.7x	4.6x	5.4x	6.5x	6.2x	6.6x	7.4x	8.0x	8.7x	9.3x	8.8x	9.7x	8.0x	7.3x	8.1x	7.8x	6.9x	7.3x
EV/Revenue	0.7x	0.6x	0.6x	0.7x	0.6x	0.6x	0.7x	0.8x	0.9x	0.9x	1.0x	0.9x	0.9x	0.8x	0.9x	0.9x	0.9x	0.8x	0.9x

Global



	Q2 11	Q3 11	Q4 11	Q1 12	Q2 12	Q3 12	Q4 12	Q1 13	Q2 13	Q3 13	Q4 13	Q1 14	Q2 14	Q3 14	Q4 14	Q1 15	Q2 15	Q3 15	Q4 15
EV/EBITDA	7.2x	5.6x	6.3x	8.3x	7.3x	8.0x	8.6x	7.6x	7.6x	7.8x	8.9x	6.9x	7.5x	6.9x	5.4x	5.2x	11.3x	8.4x	5.9x
EV/Revenue	0.9x	0.6x	0.6x	0.8x	0.7x	0.7x	0.6x	0.6x	0.5x	0.6x	0.7x	0.7x	0.8x	0.8x	0.5x	0.5x	0.6x	0.6x	0.6x

BGL Metals indices defined on Page 15.
SOURCE: S&P Capital IQ.

Relative Valuation Trends

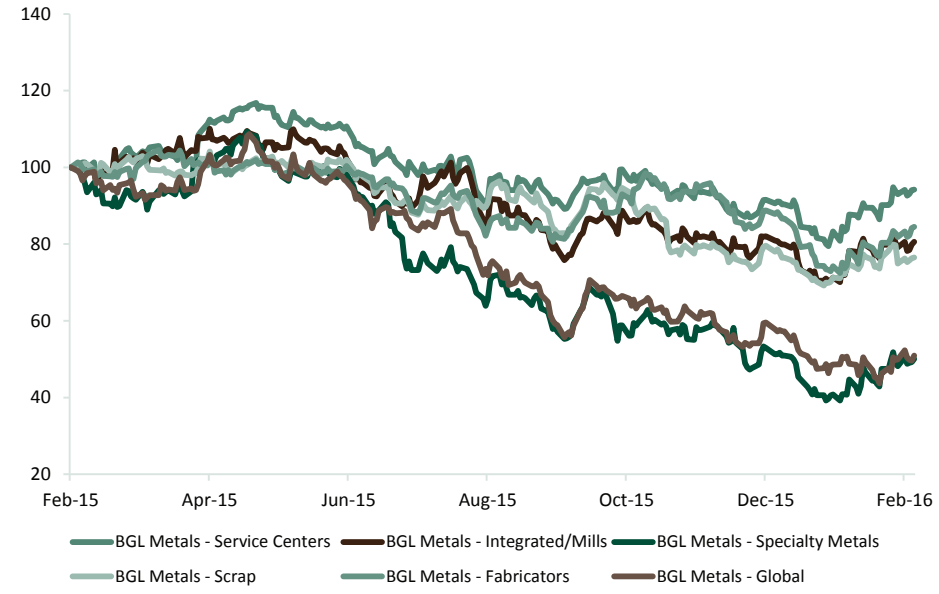
($ in millions, except per share data) Company Name	Ticker	Current Stock Price (1)	% of 52W High	Market Capitalization (2)	Enterprise Value (3)	TTM Enterprise Value / Revenue	TTM Enterprise Value / EBITDA	Total Debt/ EBITDA	TTM Revenue	TTM Margins Gross	TTM Margins EBITDA
SERVICE CENTERS											
Reliance Steel & Aluminum Co.	NYSE:RS	$60.89	91.1%	$4,376	$6,229	0.7x	7.7x	2.4x	$9,351	27.2%	8.7%
Russel Metals Inc.	TSX:RUS	12.81	62.3%	790	972	0.4x	8.5x	2.5x	2,243	17.3%	5.0%
Ryerson Holding Corporation	NYSE:RYI	10.72	111.6%	119	1,163	0.3x	5.1x	4.8x	3,367	18.1%	6.7%
Olympic Steel Inc.	NasdaqGS:ZEUS	2.15	10.3%	117	264	0.2x	***16.3x***	***9.2x***	1,176	19.8%	1.4%
A. M. Castle & Co.	NYSE:CAS	2.15	30.7%	51	362	0.4x	NM	NM	838	9.4%	-2.7%
Median		**$10.72**	**62.3%**	**$119**	**$972**	**0.4x**	**7.7x**	**2.5x**	**$2,243**	**18.1%**	**5.0%**
Mean		**$17.74**	**61.2%**	**$1,091**	**$1,798**	**0.4x**	**7.1x**	**3.3x**	**$3,395**	**18.4%**	**3.8%**
INTEGRATED/MILLS											
Nucor Corporation	NYSE:NUE	$39.34	77.6%	$12,508	$15,249	0.9x	8.3x	2.4x	$16,439	9.6%	11.1%
Steel Dynamics Inc.	NasdaqGS:STLD	18.19	78.5%	4,424	6,283	0.8x	9.7x	4.0x	7,594	9.6%	8.6%
Commercial Metals Company	NYSE:CMC	14.69	82.7%	1,708	2,388	0.4x	5.3x	2.9x	5,463	13.8%	8.3%
United States Steel Corp.	NYSE:X	9.12	32.9%	1,334	3,741	0.3x	***83.1x***	***70.2x***	11,574	3.7%	0.4%
AK Steel Holding Corporation	NYSE:AKS	2.86	48.2%	510	3,190	0.5x	6.8x	4.9x	6,693	9.9%	7.2%
Median		**$14.69**	**77.6%**	**$1,708**	**$3,741**	**0.5x**	**7.6x**	**3.5x**	**$7,594**	**9.6%**	**8.3%**
Mean		**$16.84**	**64.0%**	**$4,097**	**$6,170**	**0.6x**	**7.5x**	**3.5x**	**$9,553**	**9.3%**	**7.1%**
SPECIALTY METALS											
Allegheny Technologies Inc.	NYSE:ATI	$13.41	35.5%	$1,461	$2,920	0.8x	***79.4x***	***40.6x***	$3,720	2.3%	1.0%
Carpenter Technology Corp.	NYSE:CRS	29.72	65.4%	1,392	2,018	1.0x	8.3x	2.7x	2,028	14.7%	11.9%
Haynes International, Inc.	NasdaqGS:HAYN	30.80	59.6%	384	341	0.7x	5.8x	0.1x	472	18.1%	12.5%
Universal Stainless & Alloy Products Inc.	NasdaqGS:USAP	7.97	28.1%	60	137	0.8x	16.6x	***9.4x***	181	5.3%	4.6%
Median		**$21.57**	**47.5%**	**$888**	**$1,179**	**0.8x**	**8.3x**	**1.4x**	**$1,250**	**10.0%**	**8.2%**
Mean		**$20.48**	**47.1%**	**$824**	**$1,354**	**0.8x**	**10.2x**	**1.4x**	**$1,600**	**10.1%**	**7.5%**
SCRAP											
Commercial Metals Company	NYSE:CMC	$14.69	82.7%	$1,708	$2,388	0.4x	5.3x	2.9x	$5,463	13.8%	8.3%
Sims Metal Management Limited	ASX:SGM	4.89	52.3%	985	709	0.2x	10.0x	0.1x	3,914	11.2%	1.8%
ALBA SE	DB:ABA	56.62	91.7%	557	512	0.3x	***36.9x***	2.3x	1,804	8.7%	0.8%
Schnitzer Steel Industries, Inc.	NasdaqGS:SCHN	14.64	70.9%	392	580	0.3x	9.5x	3.4x	1,683	9.7%	3.6%
Industrial Services of America, Inc.	NasdaqCM:IDSA	1.76	32.7%	14	21	0.3x	NM	***NM***	74	-6.2%	-10.7%
Median		**$14.64**	**70.9%**	**$557**	**$580**	**0.3x**	**9.5x**	**2.6x**	**$1,804**	**9.7%**	**1.8%**
Mean		**$18.52**	**66.1%**	**$731**	**$842**	**0.3x**	**8.2x**	**2.2x**	**$2,588**	**7.4%**	**0.7%**
FABRICATORS											
The Timken Company	NYSE:TKR	$29.83	68.6%	$2,387	$2,926	1.0x	6.7x	1.5x	$2,872	27.9%	15.2%
Worthington Industries, Inc.	NYSE:WOR	31.11	94.8%	1,967	2,660	0.9x	8.5x	2.8x	3,109	13.8%	7.1%
RBC Bearings Inc.	NasdaqGS:ROLL	63.70	81.8%	1,490	1,830	3.3x	13.7x	2.9x	549	38.4%	24.4%
Metaldyne Performance Group Inc.	NYSE:MPG	14.28	58.0%	970	2,689	0.9x	5.4x	3.8x	3,047	16.9%	16.3%
Canam Group Inc.	TSX:CAM	9.36	83.0%	445	593	0.5x	7.4x	1.9x	1,158	14.3%	6.9%
Shiloh Industries Inc.	NasdaqGS:SHLO	4.34	29.5%	75	368	0.3x	6.3x	5.3x	1,109	7.9%	5.2%
Median		**$22.06**	**75.2%**	**$1,230**	**$2,245**	**0.9x**	**7.0x**	**2.9x**	**$2,015**	**15.6%**	**11.2%**
Mean		**$25.44**	**69.3%**	**$1,222**	**$1,844**	**1.2x**	**8.0x**	**3.0x**	**$1,974**	**19.8%**	**12.5%**
GLOBAL											
ThyssenKrupp AG	XTRA:TKA	$16.96	59.1%	$9,600	$14,055	0.3x	5.7x	3.6x	$45,921	16.5%	5.3%
ArcelorMittal	ENXTAM:MT	3.88	33.6%	7,718	25,804	0.4x	8.9x	5.8x	63,578	5.0%	5.4%
Tata Steel Limited	BSE:500470	3.76	66.9%	3,656	13,378	0.8x	8.6x	6.8x	18,319	39.5%	8.7%
Ternium S.A.	NYSE:TX	14.96	68.6%	2,937	5,165	0.7x	6.5x	1.4x	7,877	17.8%	13.6%
SSAB AB	OM:SSAB A	2.72	42.9%	1,395	4,244	0.6x	9.4x	7.1x	6,736	7.6%	6.8%
Median		**$3.88**	**59.1%**	**$3,656**	**$13,378**	**0.6x**	**8.6x**	**5.8x**	**$18,319**	**16.5%**	**6.8%**
Mean		**$8.46**	**54.2%**	**$5,061**	**$12,529**	**0.6x**	**7.8x**	**4.9x**	**$28,486**	**17.3%**	**7.9%**

NOTE: Figures in bold and italic type were excluded from median and mean calculation.
(1) As of 2/29/2016.
(2) Market Capitalization is the aggregate value of a firm's outstanding common stock.
(3) Enterprise Value is the total value of a firm (including all debt and equity).
Source: S&P Capital IQ.

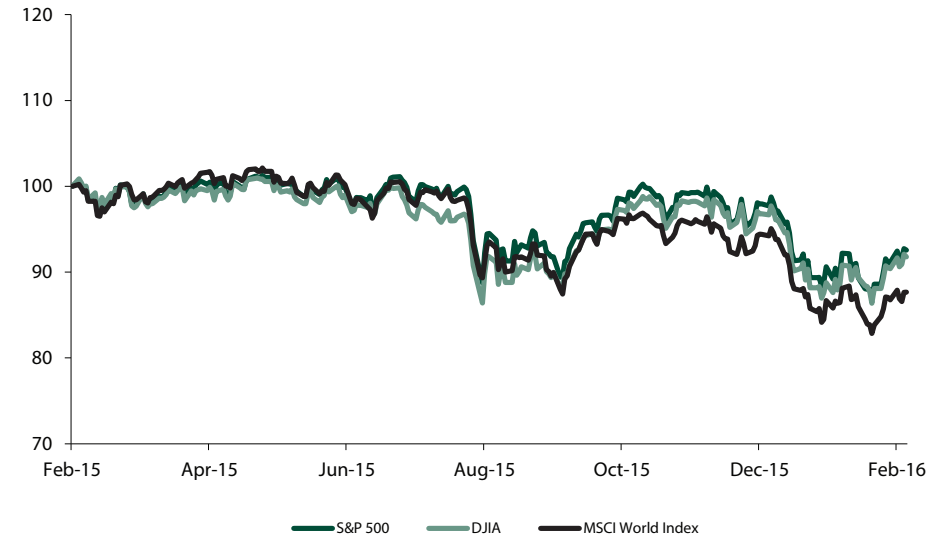
Sector Performance

Index Performance

Metals



Market



Index: February 27, 2015 = 100.

Source: S&P Capital IQ.

Global Metals Practice

MANUFACTURING

- Aero-grade titanium manufacturers
- Metal plating and finishing
- Welded and seamless tubing manufacturers
- Specialty alloy production
- High precision metal fabrication

FOUNDRIES

- Iron and steel casting
- Investment casting manufacturing
- Aluminum and zinc diecasting

SERVICE CENTERS

- Stainless steel and aluminum sheet processing
- Flat-rolled carbon production
- Metal distribution
- Material and supply chain management

METALS RECYCLING

- Non-ferrous scrap metal recycling
- Ferrous scrap metal recycling
- Scrap brokerage
- E-waste and special materials recycling

Who We Are

Leading Independent Firm

- Independent investment banking advisory firm focused on the middle market
- Senior bankers with significant experience and tenure; partners average over 20 years of experience
- Offices in Chicago and Cleveland
- Founding member and exclusive U.S. partner of Global M&A Partners, Ltd., the world's leading partnership of investment banking firms focusing on middle market transactions
- Deep industry experience across core sectors of focus, including: Business Services, Consumer, Environmental & Energy Services, Healthcare & Life Sciences, Industrials, and Real Estate

Comprehensive Capabilities

M&A ADVISORY

Sell-Side Advisory
Acquisitions & Divestitures
Public & Private Mergers
Special Committee Advice
Strategic Partnerships & Joint Ventures
Fairness Opinions & Fair Value Opinions

PRIVATE PLACEMENTS

All Tranches of
Debt & Equity Capital for:
Growth
Acquisitions
Recapitalizations
Dividends

FINANCIAL ADVISORY

General Financial & Strategic Advice
Balance Sheet
Restructurings
Sales of Non-Core Assets or Businesses
§363 Auctions

RESEARCH

Primary Research
Industry Benchmarking
Operating Advisor Network
White Papers
Industry Surveys

Representative Transactions

- Clinton Aluminum Innovative Alloys — acquired by — NORTHERN REFUGE — BROWN GIBBONS LANG & COMPANY
- HYNES INDUSTRIES — recapitalized by — RESILIENCE CAPITAL PARTNERS — BROWN GIBBONS LANG & COMPANY
- ASTROSHAPES, INC. Aluminum Extrusions — acquired by — NMLP NATIONAL MATERIAL L.P. — BROWN GIBBONS LANG & COMPANY
- GLC GREAT LAKES CASTINGS — a portfolio company of — REPUBLIC — acquired by — THE RESERVE GROUP — BROWN GIBBONS LANG & COMPANY
- Superior Tube COMPANY, INC. — acquired by — Watermill Group — BROWN GIBBONS LANG & COMPANY
- Superior Tube COMPANY, INC. — acquired by — Watermill Group — BROWN GIBBONS LANG & COMPANY
- finetubes — acquired by — Watermill Group — BROWN GIBBONS LANG & COMPANY
- USM U.S. METALS & SUPPLY — acquired by — Custom Steel processing — BROWN GIBBONS LANG & COMPANY
- GOODMAN SERVICES, INC. — acquired by — Metalico — BROWN GIBBONS LANG & COMPANY
- AP SPECIALTY METALS — acquired by — SAMUEL — Samuel, Son & Co., Limited — BROWN GIBBONS LANG & COMPANY
- SPSI — Scott Process Systems, Inc. — Review of Strategic Alternatives and Sale of Business to an Undisclosed Buyer — BROWN GIBBONS LANG & COMPANY
- The melting operations of COMMERCIAL ALLOYS — acquired by — Zn IMPERIAL ZINC — BROWN GIBBONS LANG & COMPANY
- The recycling operations of COMMERCIAL ALLOYS — acquired by — RMG RESERVE MANAGEMENT GROUP — BROWN GIBBONS LANG & COMPANY
- WOLVERINE TUBE, INC. — divested — WOLVERINE FABRICATED PRODUCTS — to — Standish CAPITAL — BROWN GIBBONS LANG & COMPANY
- TAD — TAD Metals, Inc. — acquired by — ONEAL — BROWN GIBBONS LANG & COMPANY
- Hodge Foundry — acquired by — ELYRIA EF FOUNDRY — a portfolio company of — SILVERHAWK CAPITAL PARTNERS — BROWN GIBBONS LANG & COMPANY
- WESTERN PNEUMATIC TUBE COMPANY — acquired by — TINICUM CAPITAL PARTNERS II, L.P. — BROWN GIBBONS LANG & COMPANY
- AIM Aerospace International Materials-OEM, LLC — and its affiliate — SUPPLY DYNAMICS — acquired by — ONEAL — BROWN GIBBONS LANG & COMPANY

BGL Contacts

Vincent J. Pappalardo
Head: Metals and Metals Processing
312.658.4772
vpappalardo@bglco.com

BROWN GIBBONS LANG & COMPANY
INVESTMENT BANKERS
bglco.com

GLOBAL M&A PARTNERS USA
globalma.com

For questions about content and circulation, please contact editor, Rebecca Dickenscheidt, at rdickenscheidt@bglco.com or 312-513-7476.