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Cyclicals: A Longer Term View

Since the oil-market collapse of 2014, investors in equities exposed to basic materials cyclicality have been operating in a bear market environment. The combination of expanded international capacity, low levels of domestic investment, and an industrial recession created a hostile equity-investing environment for the small cap value style. Certain signals, however, suggest fundamentals in many sub sectors of cyclical investing have bottomed and, in some cases, now enjoy positive catalysts that could provide an enduring tailwind.

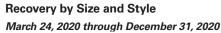
Our universe of "basic materials" industries are made up of businesses engaged in the discovery, development, and processing of raw materials. The specific sectors include but are not limited to mining and metal refining, chemical products, agriculture, building materials, and paper and forestry products.

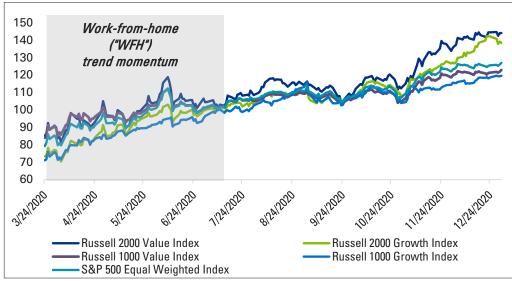
Clearing the Decks

The COVID-19 crisis in many ways "cleared the decks" for cyclical investors. After five years of persistent concerns over the next recession, investors can finally set "trough earnings" baselines for many cyclical stocks and invest with clarity around a recovery. As with previous cycles, we believe small cap value equities offer the most attractive upside to a global recovery given the correlation to nominal GDP. While the unique nature of the current crisis drove initial gains to work-from-home ("WFH") stocks, or those businesses who benefitted from remote working like software as a service businesses and internet names, small cap value has resumed normal leadership patterns since mid-summer, as multiple Phase 1 Vaccine data was published for peer review (see Figures 1 & 2).

"Certain signals, however, suggest fundamentals in many sub sectors of cyclical investing have bottomed and, in some cases, now enjoy positive catalysts that could provide an enduring tailwind."

Figure 1:





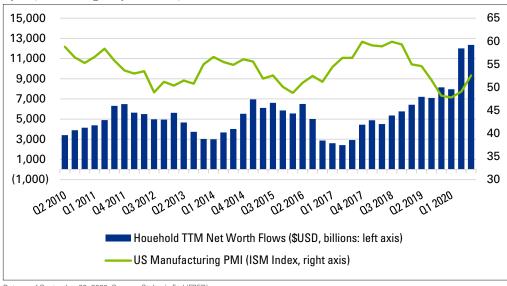
Data as of December 31, 2020. Source: Bloomberg (left axis is indexed to 100).

Momentum is the rate of acceleration of a security's price or volume – that is, the speed at which the price is changing. Simply put, it refers to the rate of change on price movements for a particular asset. Past performance is not an indication of future results.

Moving forward, the record size and speed of global stimulus in 2020 and 2021, could result in explosive nominal GDP growth. Historically, strength in U.S. household net worth has been a multi-year leading indicator for the U.S. Manufacturing Purchasing Managers' Index ("PMI"). As seen in the charts below (Figures 2 & 3), a combination of fiscal stimulus, temporarily high household savings rates, and low interest rates, has led to a rapid acceleration in net fund flows into U.S. households. This occurred just as the PMI was bottoming in 2020, a pattern that matches previous cycles of U.S. manufacturing strength. Rebounds in activity levels in the developed world should supplement what has been strong demand from Asian markets to lift global demand levels.

"Historically, strength in U.S. household net worth has been a multiyear leading indicator for the U.S. Manufacturing Purchasing Managers' Index ("PMI")."

Figure 2:



U.S. Household Net Worth Flows (TTM) versus Manufacturing PMI April 1, 2010 through September 30, 2020

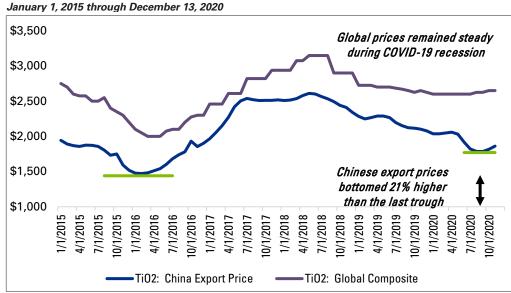
Data as of September 30, 2020. Source: St. Louis Fed (FRED). TTM = Trailing 12 months.

Strength in Subsectors, Tight Inventories, and Higher Troughs

We are observing stabilizing trends across many cyclical subsectors, driven by a maturing supply dynamic from international competitors, low domestic capacity, and inflationary pressures in operating costs. A few examples of price stability across cyclical subsectors include chemicals coatings like TiO2, agriculture commodities such as grains, fertilizers and sugar, and certain metals including copper, nickel and aluminum.

Unlike prior recessions, TiO2 global pricing remained steady during the downturn in the first half of 2020. Chinese export prices bottomed at a level 21% above the prior cyclical trough (Figure 3), while global prices stayed flat and even ticked up recently. Several Western suppliers have announced more meaningful price increases starting in January 2021.

Figure 3:



TiO2 (left axis, \$USD/ton)

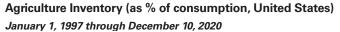
Data as of December 13, 2020. Source: China General Administration of Customs, ICIS, TZMI, UBS, Morgan Stanley Research. Past performance is not an indication of future results.

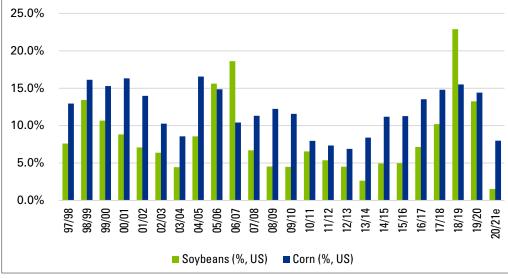
Agricultural supply chains are experiencing a bit of a renaissance, with tight inventories and improving profitability metrics. IHS Markit is forecasting U.S. soybean "stocks-to-use," which measures inventory as a percentage of consumption, for the 2021 marketing year to end at 1.4%. This compares favorably to 2019 and 2020 levels of 23% and 13% respectively, as global demand exceeded expectations while acres planted and yields disappointed amid farmer uncertainty during the pandemic. This would represent the lowest level on record (Figure 4).

"We are observing stabilizing trends across many cyclical subsectors, driven by a maturing supply dynamic from international competitors, low domestic capacity, and inflationary pressures in operating costs." Alongside soybeans, corn and sugar represent areas of strength within agriculture. While demand continues to grow globally, depressed prices over the last four or so years has dampened supply production, and inventories are now low (Figure 4). Harvested sugar acres in Brazil, which accounts for over 23% of global supply, has steadily declined while inventories have tightened and pricing has increased (Figure 5).

Global stocks-to-use are expected to remain tight. Strong market demand is expected to lead to elevated pricing levels for many agriculture commodities not seen since the last upturn, between 2010 and 2014.

Figure 4:

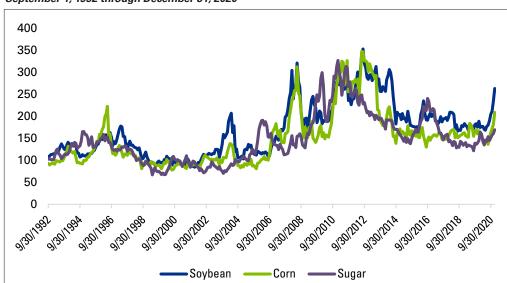




"Agricultural supply chains are experiencing a bit of a renaissance, with tight inventories and improving profitability metrics."

Data as of December 10, 2020. Source: USDA, Morgan Stanley Research, IHS Market. Estimates reflect subjective judgements and assumptions. There can be no assurance that developments will transpire as forecasted and that the estimates are accurate.

Figure 5:



Agriculture Commodity Pricing (CME Futures) September 1, 1992 through December 31, 2020

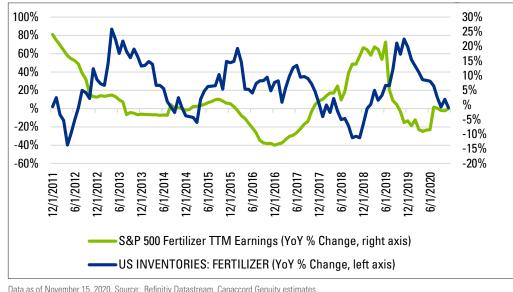
> "Alongside soybeans, corn and sugarcane represent areas of strength within agriculture.."

Meanwhile, fertilizer-inventory growth in the U.S. turned negative on a year-over-year basis in September 2020. The last time inventories turned negative was January 2018, which subsequently led to strong earnings growth for fertilizer companies in 2018 (Figure 6).

Figure 6:





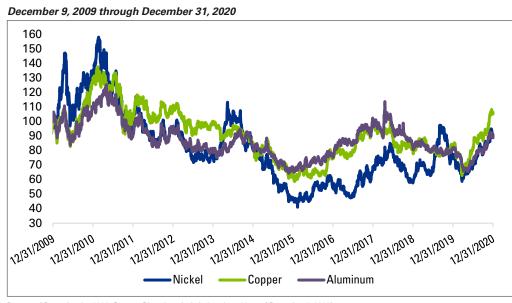


TTM = Trailing 12 months. Past performance is not an indication of future results.

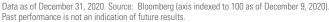
And within certain metals, the global 10-year structural deficit is increasing, which has historically led to strength in pricing. The continued pattern of "higher lows and higher highs" in the face of the global pandemic and soft aircraft original equipment manufacturers ("OEMs") output is noteworthy. Following the gradual bottoming of metals prices in 2015, these trends have helped to support the recent recovery (Figure 7).

Figure 7:

Metals Pricing



"The continued pattern of "higher lows and higher highs" in the face of the global pandemic and soft aircraft original equipment manufacturers ("OEMs") output is noteworthy."



China Maturation in Global Commodity Trade Flows

Another factor supporting the global rebound in commodities is China's evolution into a more rational global economic trade partner since 2015. According to data released by the Census and Economic Information Center ("CEIC"), China expanded credit to fixed-asset industries between 2010 and 2015, subsidizing the build out of unsustainable production capacity across a wide array of sectors. The subsidies provided by the government came in multiple forms -- sometimes as direct transfers via local government stimulus and credit and other times by overlooking global standards on quality and environmental regulations. Since 2015, the Chinese government has worked to rationalize excess capacity, better enforce global environmental standards, and to limit the number of "bad actors" through mandated consolidation.

Moreover, fixed-asset investment, or total spend on non-rural capital investments such as factories and infrastructure, has decelerated over the last 10 years and is now growing at approximately the same pace as China's GDP growth. Between 2010 and 2014, fixed-asset investment in China grew at an average of roughly 19%, while GDP growth averaged about 9% growth. Since 2016, both metrics have decelerated to average approximately 7% growth, annually.

"Since 2015, the Chinese government has worked to rationalize excess capacity, better enforce global environmental standards, and to limit the number of "bad actors" through mandated consolidation."

Figure 8:



China Fixed Asset Investment Deceleration January 1, 2010 through December 31, 2019

Data as of December 31, 2019. Source: World Bank, CEIC, Goldman Sachs Investment Research.

The steel and chemical industries, in particular, are emblematic of China's behavior in the pre- versus post-2015 time periods (Figure 9). These trends have been consistent across many commodity-based industries. In steel, between 2009 and 2015, Chinese exports grew from 24 million tons to a peak of 112 million tons in 2015, rising from 2% of global output to 7%. Since 2015, Chinese steel exports have declined to 64 million tons, representing 3% of global steel output, falling back to 2010 levels. Many fixed-asset industries have targeted reductions in excess capacity.¹

¹ China's industrial policy seeks to enhance indigenous innovation, reduce overcapacity, and develop the country's high-technology and environmental industries, including biotechnology, high-end manufacturing equipment, and new-generation information technology. U.S.-China Economic and Security Review Commission, Chapter 1, Section 3, "China's State-Led Market Reform and Competitiveness Agenda," in 2015 Annual Report to Congress, November 2015, 158–162.

Figure 9:

Global Steel C	Output vs (China Steel	Exports
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January 1, 2009 through December 31, 2019



"Since 2015, Chinese steel exports have declined to 64 million tons, representing 3% of global steel output, falling back to 2010 levels."

Data as of December 31, 2019, Source: IISI, Goldman Sachs Global Investment Research.

Similar to declines in output, China's government-mandated consolidation among industry participants has also had an impact. The number of stateowned firms producing chemicals products in China, for instance, has dropped approximately 15% between 2015 and 2019, while revenue in China's chemicals industry grew by 13% over that same timeframe (Figure 10).

Through the consolidation activity, China sought to eliminate high-cost, small/ mid-sized state-owned enterprises who benefitted from direct government subsidies. At the same time, the merger activity incentivized the combination of larger state-owned enterprises ("SOEs") to achieve greater scale and efficiency². In the monosodium glutamate market, for example, McKinsey documented that the consolidation efforts to eliminate environmental "bad actors" shut down 30% to 40% of all Chinese production capacity, and the supply curtailment led to a nearly 50% price increase in China³. Through rationalizing capacity, China also aims to create a healthier industrial environment, characterized by a market-driven return on assets employed. This dynamic is taking place across many fixed-asset industries in China.

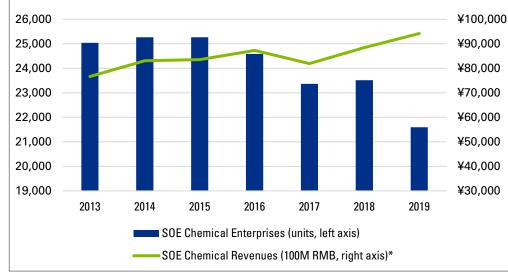
"Through the consolidation activity, China sought to eliminate high-cost, small/mid-sized state-owned enterprises who benefitted from direct government subsidies."

² SOE Megamergers Signal New Direction in China's Economic Policy, USCC, May 24, 2018.
³ China's Chemical Industry: New Strategies for a New Era" China's chemical industry: New strategies for a new era (mckinsey.com).

Figure 10:

China: Industry Consolidation





"Through rationalizing capacity, China also aims to create a healthier industrial environment, characterized by a market-driven return on assets employed "

Data as of December 31, 2019. Source: China NBS.

SOE = State Owned Entity

*2019 revenue estimated by WPG using McKinsey's project growth in China chemical sector revenues. Estimates reflect subjective judgements and assumptions. There can be no assurance that developments will transpire as forecasted and that the estimates are accurate.

U.S. Dollar

Finally, no discussion on cyclicals and commodities would be complete without context around trends in the U.S. Dollar. USD depreciation tends to occur during reflationary periods, and often leads to a multi-year recovery in commodity prices. Given this historical context, the current weakness in the USD only further strengthens the case for likely cyclical outperformance.

"USD depreciation tends to occur during reflationary periods, and often leads to a multi-year recovery in commodity prices."

Figure 11:





Data as of December 31, 2020. Bloomberg. (USD index is calculated using a weighted basket of currencies; Commodity index is calculated using a weighted basket of commodities)

Axes are indexed to 100. Past performance is not an indication of future results.

Exposure to the Rebound

Given the high degree of correlation to nominal GDP and historical outperformance coming out of recessions, we believe an active approach to identifying the most attractive small cap value names represents a particularly compelling investment opportunity in the foreseeable future.

For some context, the Russell 2000[®] Value Index peaked in 2018 and hit a bottom in March 2020. The current strength reflected by the rapid recovery in the underlying cyclical markets may drive the momentum in small cap value for the foreseeable future, particularly after lagging large cap growth for the better part of five years. Not to be overlooked, value should create less downside exposure in the event of an equity market drawdown given current relative valuations across the broader market. However, after a lost decade for cyclicals, we believe there is equal room to run on the other side.

"...we believe an active approach to identifying the most attractive small cap value names represents a particularly compelling investment opportunity in the foreseeable future."

Definitions:

Bear market: when a market experiences prolonged price declines. It typically describes a condition in which securities prices fall 20% or more from recent highs amid widespread pessimism and negative investor sentiment

Cyclical investing: stocks whose price are affected by macroeconomic or systematic changes in the overall economy

Nominal GDP: measures a country's gross domestic product using current prices, without adjusting for inflation

U.S. Manufacturing Purchasing Managers' Index ("PMI"): an index of the prevailing direction of economic trends in the manufacturing and service sectors. It consists of a diffusion index that summarizes whether market conditions, as viewed by purchasing managers, are expanding, staying the same, or contracting

Interest rates: the amount a lender charges for the use of assets expressed as a percentage of the principal

Reflationary: expansion in the level of output of an economy by government stimulus, using either fiscal or monetary policy

Russell 2000 Value Index: stocks included in the value index are selected based on a "probability" of value as measured by their relative book-to-price (B/P) ratio

Inflation: a general increase in prices and fall in the purchasing value of money.

USD Index: a basket-weighted reflection of the exchange rates between USD and major world currencies.

Bloomberg Commodity Index: reflect commodity future prices, rebalanced annually.

About Boston Partners

Boston Partners is a premier provider of value equity investment strategies that are firmly rooted in fundamental research and are based on a disciplined and repeatable investment philosophy and process. Boston Partners is focused on investing in companies with attractive value characteristics, strong business fundamentals, and positive business momentum and shorting companies whose stocks exhibit value risk, earnings risk, and balance sheet risk. While rooted in fundamental research, the process is heavily aided by quantitative tools to narrow the investment universe and ensure portfolios are consistently tilted towards attractive value, quality, and momentum characteristics on the long side and the inverse on the short side. The firm was founded in 1995. Boston Partners is an indirect, wholly owned subsidiary of ORIX Corporation of Japan. The WPG Small/Micro Cap Value Fund was formerly part of Weiss, Peck & Greer, which managed assets since 1970 and was acquired in 1998 by Robeco. In 2007 it was merged into Robeco's U.S. operations, and in 2014 it became part of Boston Partners' strategies.

About the Author

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Mr. Gandhi is a Portfolio Manager for the WPG Partners Small and Micro Cap Value team. He joined WPG Partners in July 2012 as a research analyst with a concentration in technology, media, telecom and consumer. Prior to joining the firm, he was a member of the Applied Value Investing program at Columbia Business School. Before Columbia, Mr. Gandhi was an Associate in the investment banking division at Needham & Company. He graduated with a B.S. degree from the University of Maryland and received an M.B.A. from Columbia Business School. Mr. Gandhi holds the Chartered

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Value stocks can perform differently from the market as a whole. They can remain undervalued by the market for long periods of time.

Investments in micro, small and mid-capitalization companies present a greater risk of loss than investments in large companies due to greater volatility and less liquidity.

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