

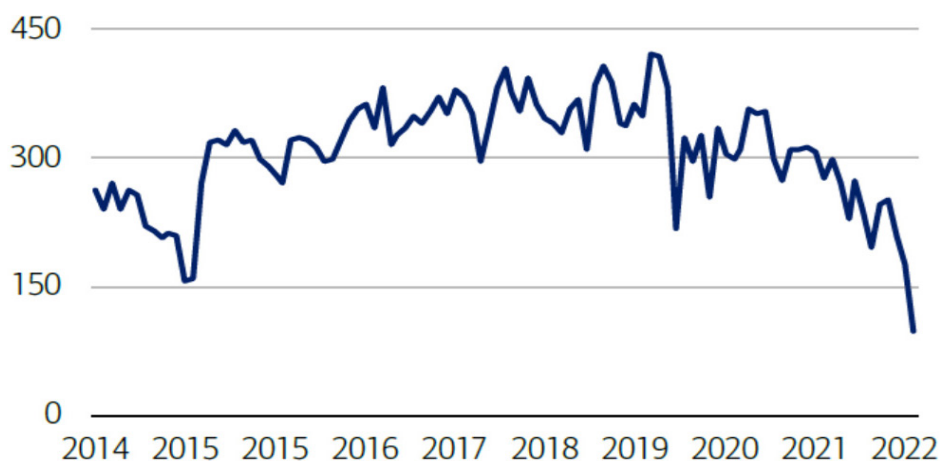
Driehaus Emerging Markets Small Cap Equity Strategy Summary

JULY 2022

This month's commentary presents our favorite charts across emerging markets (EM), showing the themes represented in the portfolio.

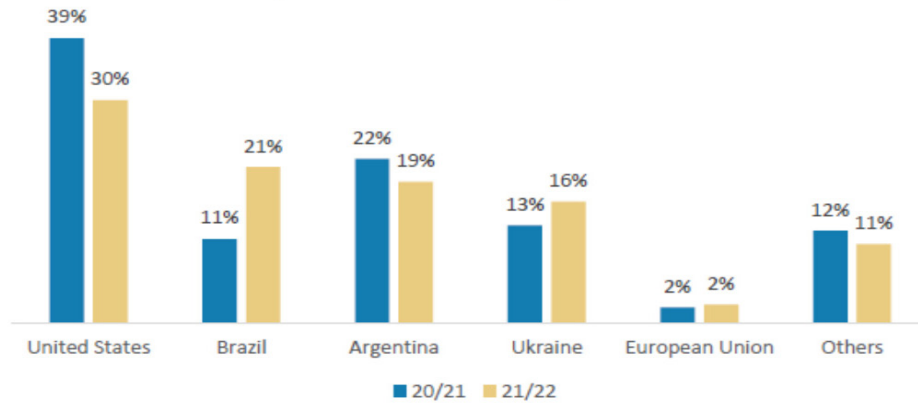
Global equity markets have faced two distinct macro and geopolitical headwinds, both entailing far-reaching consequences. Russia's invasion of Ukraine has roiled global energy and agriculture markets, with implications for commodity flows, inflation, and risk premia (Exhibits 1-4). Meanwhile, China's strict adherence to a zero-COVID policy brought about mass testing and lockdowns that at their peak encompassed nearly a quarter of the country's GDP and included a multi-week lockdown of Shanghai, causing economic activity to collapse (Exhibit 5).

Exhibit 1: Gas Flows From Russia to Europe



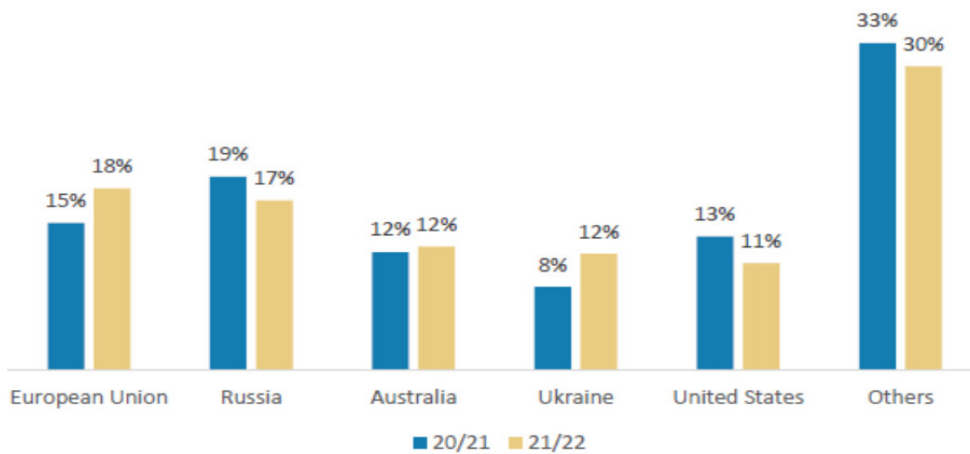
Source: Bloomberg, BofA Global Research

Exhibit 2: Global Corn Exports



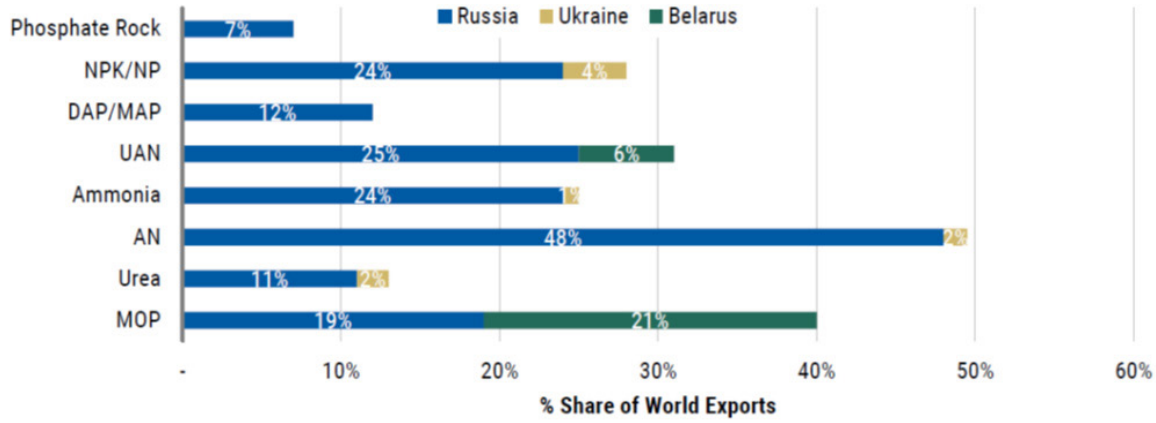
Source: US Department of Agriculture

Exhibit 3: Global Wheat Exports



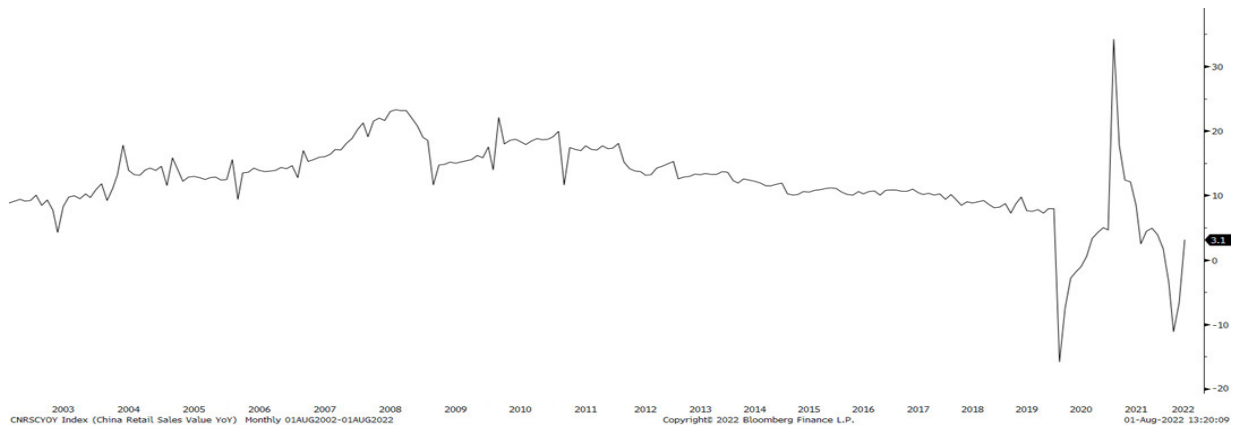
Source: US Department of Agriculture

Exhibit 4: Global Fertilizer Exports



Source: CRU, Morgan Stanley Research

Exhibit 5: China Monthly Retail Sales Growth (Y/Y)

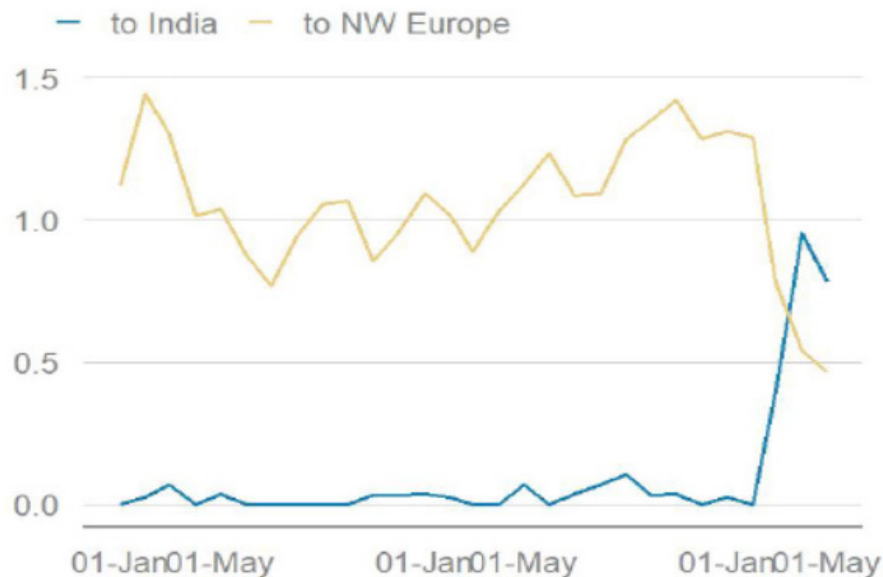


Source: Bloomberg

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Historically, amid an exogenous shock to commodities, India would typically stand out as one of the most vulnerable emerging economies, owing to a large energy import bill. However, India's economy has been able to weather the storm, in part due to rising imports of Russian crude at a substantial discount to global benchmark prices (Exhibit 6). Indian small caps have quietly outperformed the MSCI EM Small Cap Index since Russia invaded Ukraine, although most of that performance has come since the oil price peaked in mid-June.

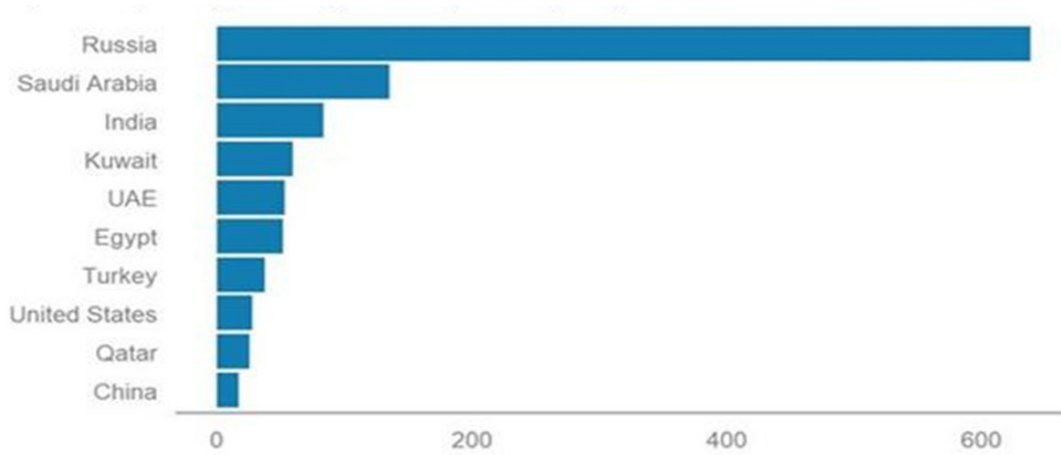
Exhibit 6: India's Crude Imports from Russia



Source: Kpler, Morgan Stanley Research

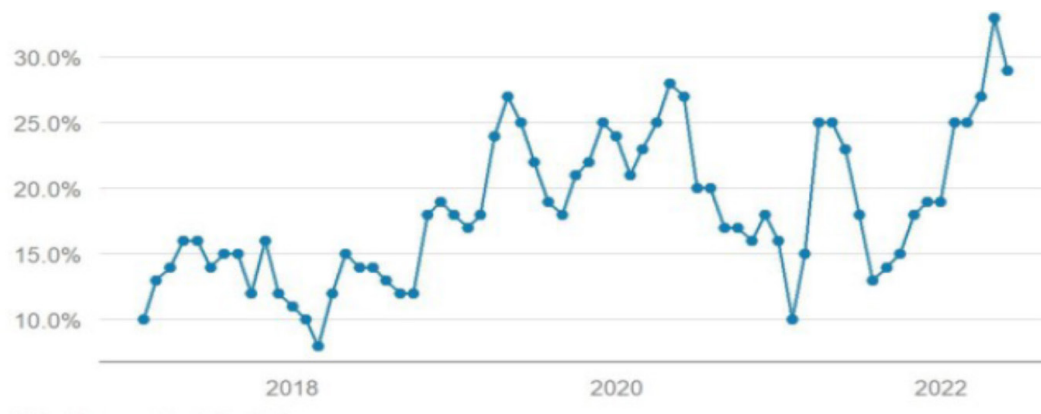
Europe also faces significant energy vulnerability, due to reliance on Russia for diesel fuel (Exhibit 7) and natural gas. Earlier this year, Europe announced aggressive plans to displace Russian gas in the years ahead, and recent pipeline curtailments by Russia have only added to the sense of urgency. Prior to the war, Europe's share of global liquefied natural gas (LNG) consumption was already on the rise, and this is expected to continue to climb in the future (Exhibit 8). Europe is likely to significantly increase its amount of contracted LNG to improve the security of supply.

Exhibit 7: Europe Seaborne Imports of Middle Distillate



Source: Kpler, Morgan Stanley Research

Exhibit 8: Europe Share of Global LNG Imports

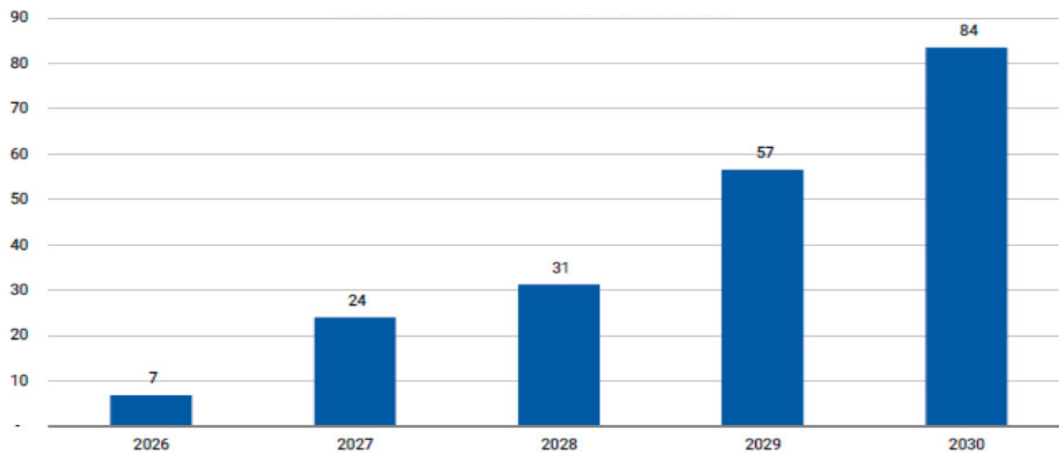


Source: Kpler, Morgan Stanley Research

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This growing demand for LNG is likely to create an increasing shortfall between supply and demand, leading to a rising amount of final investment decisions (FIDs) being undertaken in the years ahead (Exhibit 9). LNG projects require massive amounts of investment and long lead times, so while this will not solve Europe's developing energy crisis in the near-term, the longer-term investment in this area will be a strong contributor for emerging economies such as Qatar. The Strategy is invested in a leading Qatari LNG vessel operator, which is poised to expand its fleet in the years ahead, as a result of this burgeoning demand.

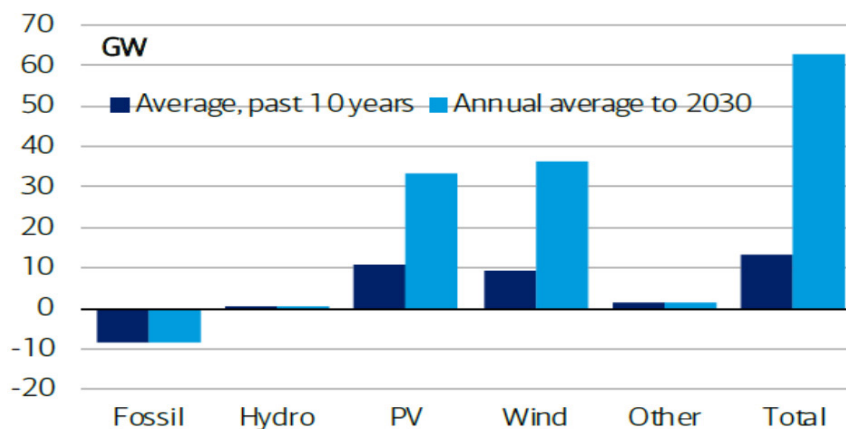
Exhibit 9: Global LNG Shortfall at Existing Capacity



Source: Bloomberg, Morgan Stanley Research

Meanwhile, Europe's dire energy predicament will likely create an even greater sense of urgency for investment in renewable energy (Exhibit 10). According to Goldman Sachs, cumulative investments of €10 trillion will be needed by 2050 for Europe's energy transformation, which would ultimately reduce the net energy import dependency rate of the region from 58% to 15% over the same timeframe.

Exhibit 10: Europe Renewable Energy Investment



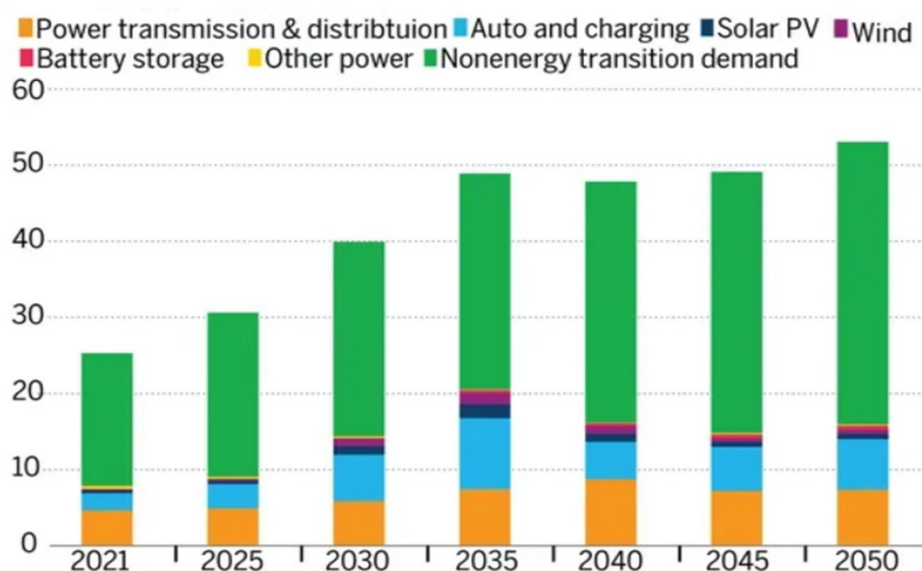
Source: BNEF, European Commission, BofA Global Research

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With an estimated 75% of the global renewable energy supply chain being based in China, we continue to find a strong investable opportunity set in wind and solar stocks. In addition to Europe's aggressive growth in renewable energy capacity, China itself continues to transition toward renewable energy, while liberalizing its power market, allowing utilities to capture more of the economic benefit. The Strategy is invested in a wind power component manufacturer, a next-generation solar cell equipment producer, and an independent solar farm operator, all of which are benefiting from the growth of renewable energy.

Accompanying the rising investment in renewables is greater demand for metals such as copper and aluminum, which are used in wind and solar power, electric vehicles, charging infrastructure, wires, and power grid infrastructure. Analysts from S&P Global foresee a significant amount of copper usage in the years ahead (Exhibit 11), as energy transition becomes the dominant driver of the metal. Mining executive Robert Friedland notes that an electric vehicle consumes roughly 10 times as much copper as an internal combustion engine vehicle, and that is before considering the copper content of the associated charging infrastructure. Incumbent producing nations, Chile and Peru, which represent roughly 40% of global copper production, have struggled to grow output amid rising tax and regulatory measures in Chile, along with geopolitical concerns and local protests and blockades in Peru. The Strategy is invested in two copper miners with operations in relatively more mining friendly jurisdictions, which are seeking to develop large scale projects that will be necessary to fill a growing supply gap.

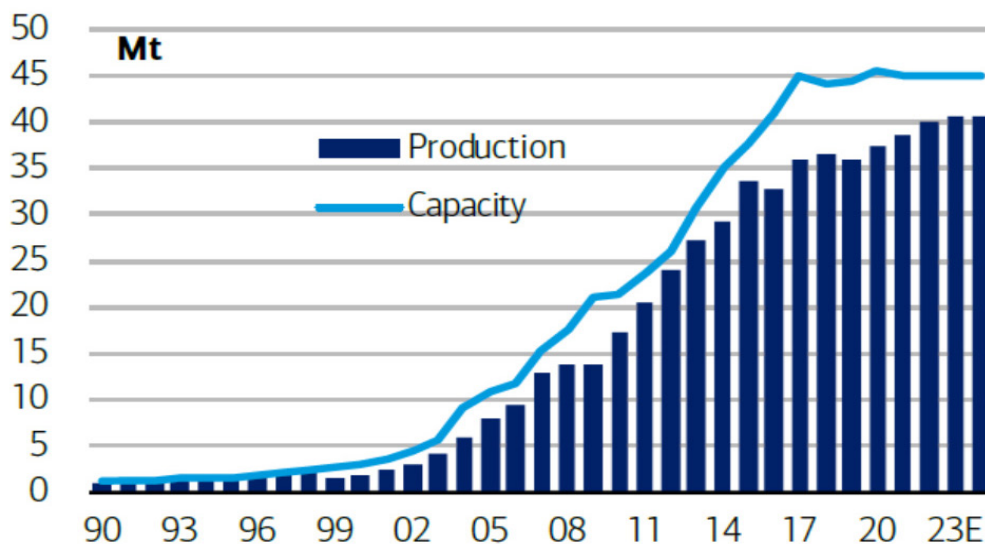
Exhibit 11: Global Copper Demand Could Rise Significantly



Source: S&P Global, Financial Post

Despite uncertainty about supply, the world will not run out of copper. However, should prices move high enough, new supply of copper will be increasingly incentivized, as will substitutes, the most natural one being aluminum. Cables made of aluminum have roughly 60% of the conductivity of copper, at half the weight. This makes the metal a suitable substitute in high voltage power lines. Larger amounts of transmission and distribution infrastructure will be needed to support renewable energy, making aluminum a key beneficiary. Demand for aluminum has never been questioned. However, supply has grown at a rapid pace, fueled by cheap power and China's ambitions to build industrial capacity over the last two decades. This has changed, as China has announced a cap on future aluminum capacity, implying room for the world's largest producer, at over 56% share of global aluminum production, to increase future capacity by only 10% (Exhibit 12).

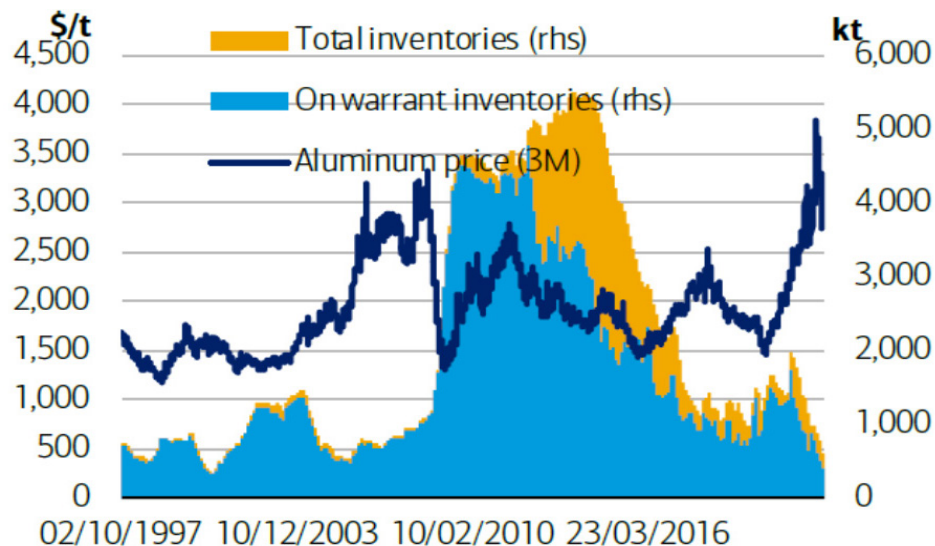
Exhibit 12: China Aluminum Production and Capacity Cap



Source: SNL, Woodmac, CRU, Bloomberg, company reports, IAI, BofA Global Research

As one of the most energy-intensive metals to produce, aluminum producers have been hit hard by a rising energy bill, particularly those based in Europe. Currently about 30% of global capacity is loss-making, due to high energy costs. The Strategy is invested in a Brazilian aluminum producer that we view as a prime beneficiary of these trends, due to its integration with key raw materials, along with its renewable energy resources, which place the company in an attractive position on the cost curve. With global inventories near 20-year lows (Exhibit 13) and strong visibility into tightening future supply, we believe that aluminum prices could move substantially higher in the years ahead.

Exhibit 13: Aluminum Prices and LME Inventories

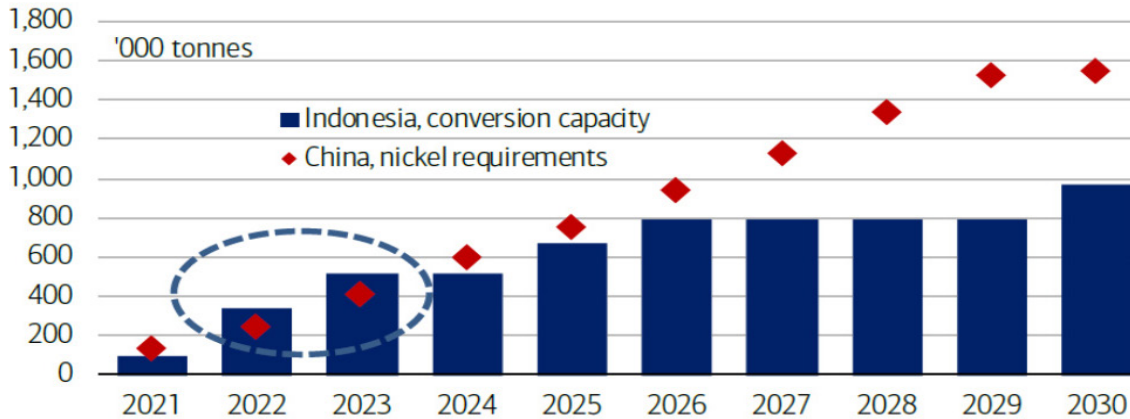


Source: Woodmac, Bloomberg, BofA Global Research

Elsewhere within the metals complex, we expect significant demand increases for nickel in the coming years, owing to its role in electric vehicle batteries. As global OEMs scale up production of EVs in developed countries, consumers will demand premium batteries with high energy density, making the vehicles suitable for long-distance travel. This benefits nickel, which is featured prominently in such battery chemistries.

Again, EM countries are poised to benefit from this trend, as Indonesia possesses approximately 25% of the world's nickel reserves. While demand from the metal's core usage of stainless steel production has lagged, and EV related demand is not yet large enough to move the needle, this is set to change in the coming years. As shown below, by 2024, the world could be staring at a widening deficit of this important metal, right at the time when EV penetration is ramping up (Exhibit 14). The Strategy is invested in an Indonesian mining company which recently acquired the world's third largest nickel mine. As this asset is advanced into production, we believe it will fill a pivotal role in meeting the growing global demand for nickel from EV batteries.

Exhibit 14: Nickel Surplus/Deficit

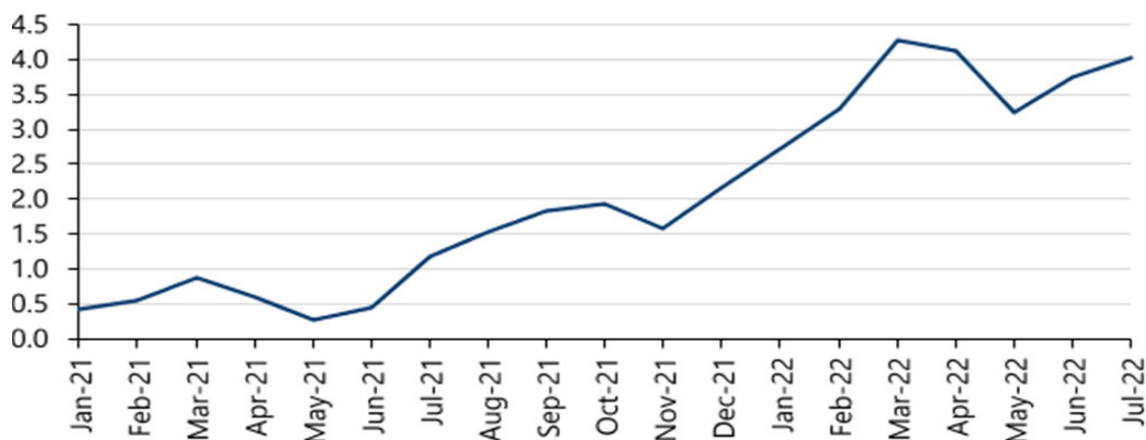


Source: Woodmac, BofA Global Research

Similar to renewable energy, China is a dominant player in the EV supply chain, as well as an early adopter of the technology within the ranks of leading auto OEMs in the country. Indeed, multiple Chinese EV companies have been listed on global stock exchanges in the last five years. Year-to-date through June, global EV sales are up 64% year-over-year, at 4.2 million units, while 62% of June EV sales came from China. Zero-COVID policy did not impact demand or production, as China produced 569,000 units in June, while year-to-date production is up 124% year-over-year. The Strategy is invested in numerous Chinese EV supply chain beneficiaries, including a producer of structural parts for EV batteries, which provide critical safety features to prevent fires, as well as a producer of high-end capacitors, which we expect to take market share through import substitution as China's domestic market continues its rapid ascent.

However, EM's EV boom is by no means confined to China. Seemingly out of nowhere, India's 2-wheeler manufacturers have seen a sharp rise in EV adoption, with EVs increasing from 0.5% to 4% of the market in just over one year's time (Exhibit 15). While this is still a low share of total 2-wheelers, this proportion is set to grow significantly in the years ahead. The Strategy is invested in one of the top 2-wheeler manufacturers in India, which has been at the forefront of this trend.

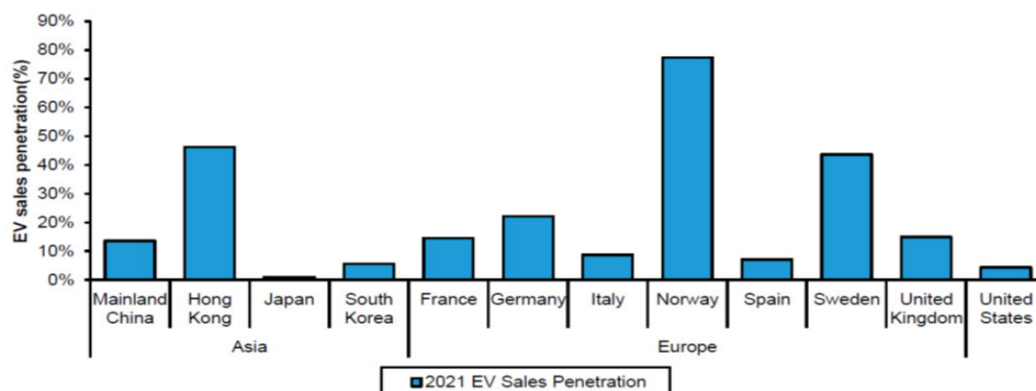
Exhibit 15: Share of EVs in Indian 2-Wheeler Registrations



Source: Jefferies

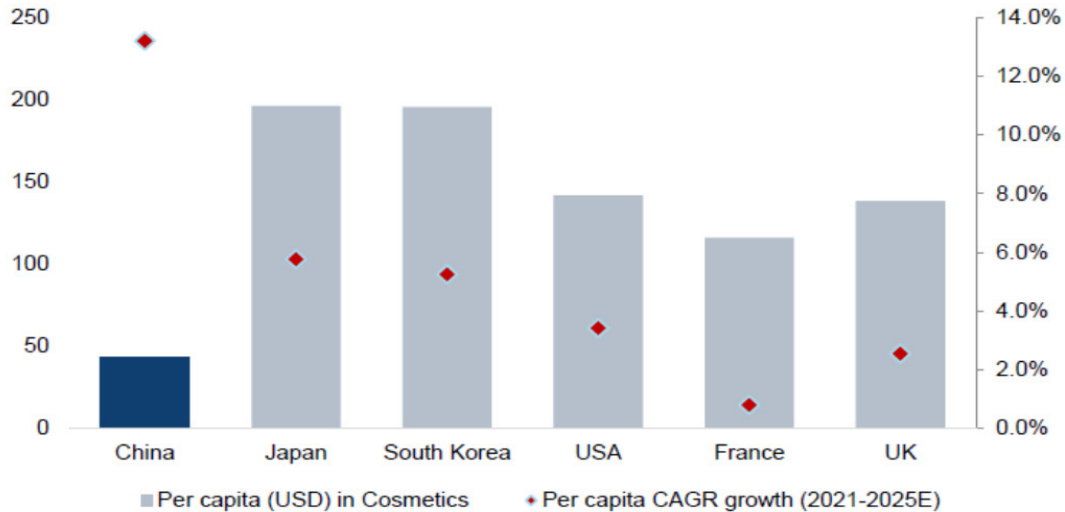
There remains substantial room for multi-year growth in electric vehicles, as shown in the penetration chart below (Exhibit 16). Bloomberg estimates that global EV penetration will reach 33% by 2030, while projections by both leading auto OEMs and governments point to levels closer to 50%. As shown below, only a small number of countries are anywhere close to those levels today.

Exhibit 16: Global EV Penetration by Country



Source: IHS, SNE, and Bernstein analysis

Exhibit 17: Per Capita Spending on Cosmetics by Country



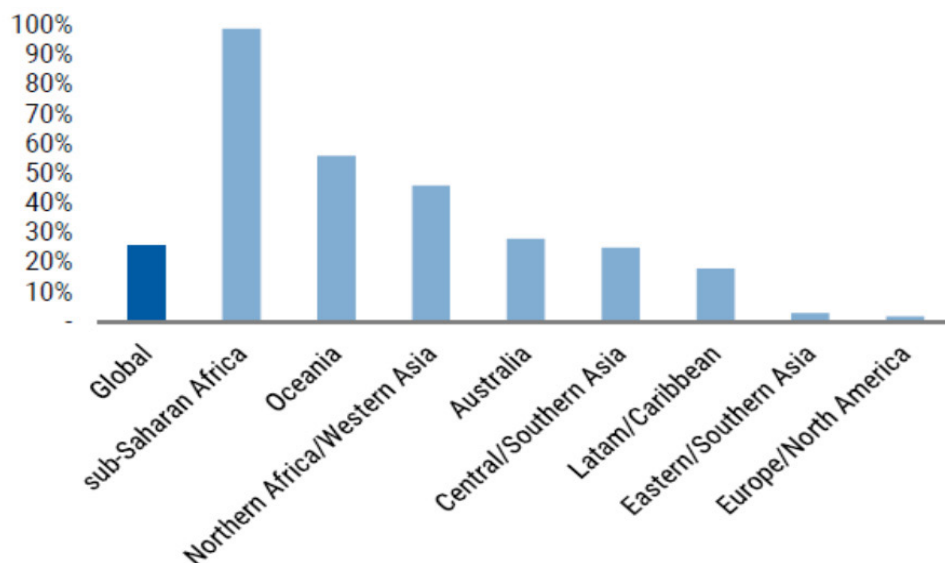
Source: Jefferies

Amid a scarce growth environment, Latin America has stood out as a source of ideas within the Strategy. Brazil's strength in the production of commodities such as iron ore and oil have supported the terms of trade, helping the Brazilian real buck the trend of currency weakness seen across much of the rest of the world. Brazil is also a dominant producer of agricultural commodities, which have benefited on a cyclical basis, but also appear to be poised for structural growth.

While parts of the world are seeing stagnating population growth, in aggregate the UN estimates that the global population will grow by 2 billion people by 2050 (Exhibit 18). Against that backdrop, large portions of the global wheat, corn, soybean and rice crops face structural risks due to climate change (Exhibit 19).

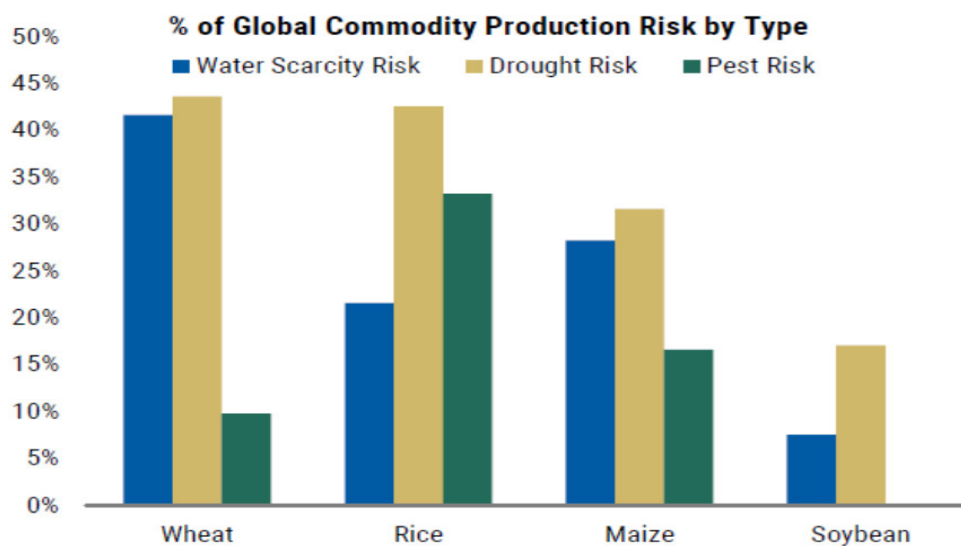
These trends carry numerous implications across the agricultural commodity supply chain. The Strategy generated strong returns from an investment in a fertilizer producer, which is benefiting from improved pricing power, while also maintaining an investment in a producer of crop protection products. Additionally, one of the Strategy's top holdings is a Brazilian agribusiness company that owns farms that produce corn, cotton, and soybeans. Brazil's state of Mato Grosso may potentially become a huge supplier on the global market for these commodities, as a result of favorable climate conditions, and significant room to transform the existing landbank from pastures to productive agricultural use. Brazil has recently made inroads as a corn exporter to China, and this relationship looks poised to accelerate in the coming years.

Exhibit 18: Global Population Growth (2019-2050)



Source: UN Department of Economic and Social Affairs

Exhibit 19: Global Crop Production Risk

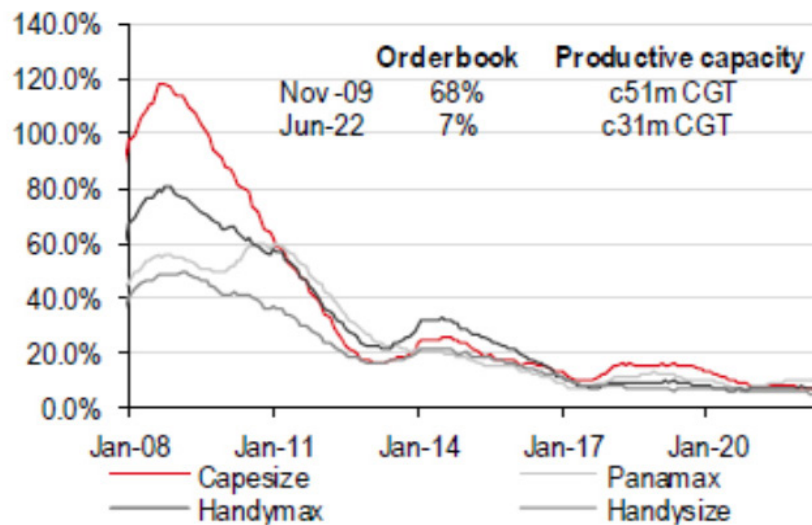


Source: IHS, SNE, and Bernstein analysis

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As more agricultural commodities are exported from Brazil to China, the demand for dry bulk shipping is likely to increase, in our view. Disruptions to trade routes resulting from the Russia-Ukraine war have also changed shipping patterns and export flows. Against this backdrop, it is notable that dry bulk ship owners are expanding their fleets at the lowest pace in over a decade. With an orderbook/fleet ratio of only 6.9% (Exhibit 20), overall fleets are unlikely to witness much growth, as 8% of the current fleet is over 20 years old and likely to be scrapped in the years ahead. Moreover, with looming environmental regulations on the industry set to kick in later this decade, ship owners are hesitant to order a long-lived asset that may become obsolete in only a few years. These conditions are creating strong pricing power for dry bulk ship operators, and the Strategy is invested in a leading player within the industry, which is benefiting from these trends. While exhibiting strong earnings growth, the company is also returning capital to shareholders, and its dividend for the first half of 2022 alone amounts to a 15% yield.

Exhibit 20: Dry Bulk Orderbook/Fleet Ratio



Source: Clarksons Research Services

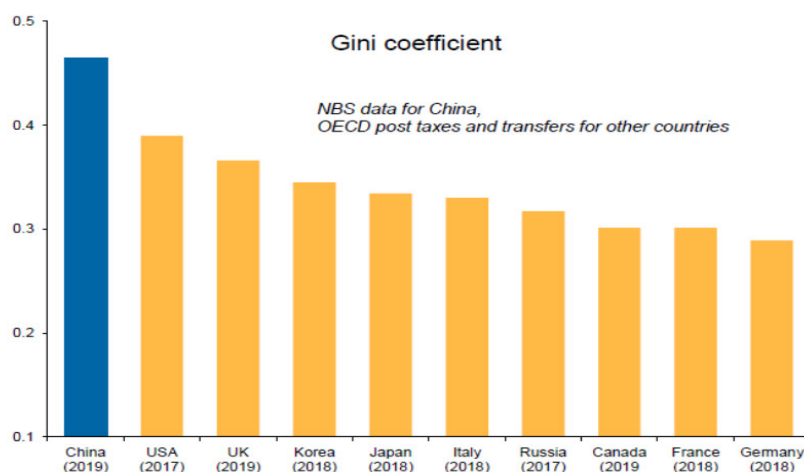
Lastly, we leave you with a series of demographic charts and datapoints that may be thought provoking. One of the most frequently asked questions we receive from clients is "why is China still considered an 'emerging' market?" The question is generally posed in the context of China's rapid ascent in the ranks of global manufacturing powers, alongside the visions of skyscrapers and bustling economic activity in tier-1 cities like Beijing, Shanghai, and Shenzhen.

However, as Premier Li Keqiang noted, over 600 million people in China have a monthly income under Rmb1,000 (\$148 at the current exchange rate). This compares to China's GDP per capita of \$12,556, as measured by the World Bank. This datapoint provides context for why China continues to be classified as an emerging market, despite some transformational economic achievements over the past 20 years.

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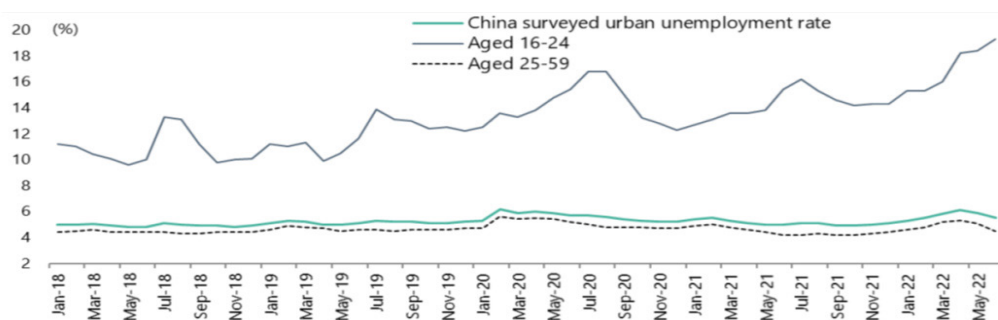
Further, it may shed some light on the motivations of China's regulatory crackdown that intensified throughout 2021. Strategically, China can ill afford a stagnation of its GDP per capita and a continuation of extreme levels of income inequality (Exhibit 21). These developments have accompanied a worrisome rise in youth unemployment (Exhibit 22). Conversely, if China is able to follow a trajectory for GDP per capita that resembles Korea and Taiwan's development paths, the country would cement its status as an economic superpower (Exhibit 23). All of these datapoints are in the context of a continued slowdown in population growth, as China's working age population has already peaked, and its overall population should soon follow (Exhibit 24).

Exhibit 21: Gini Coefficient Across OECD Countries



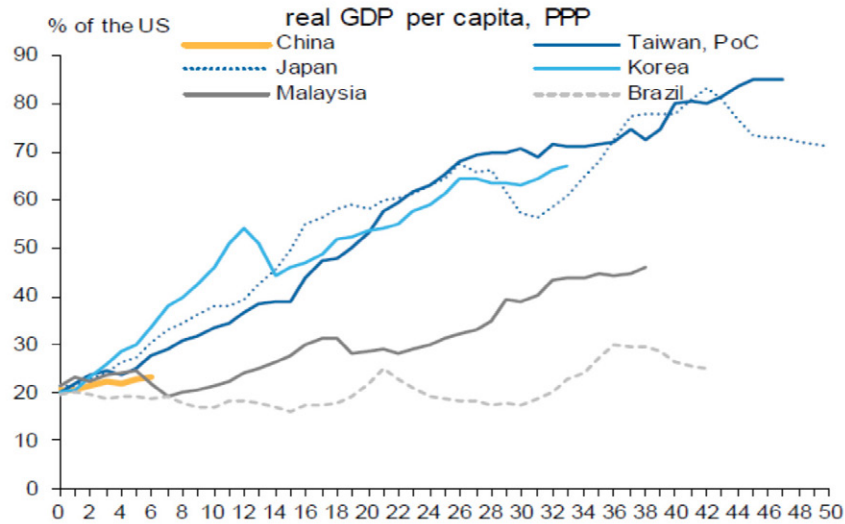
Source: NBS, OECD, Macquarie Macro Strategy, August 2021

Exhibit 22: China Urban Unemployment Rates



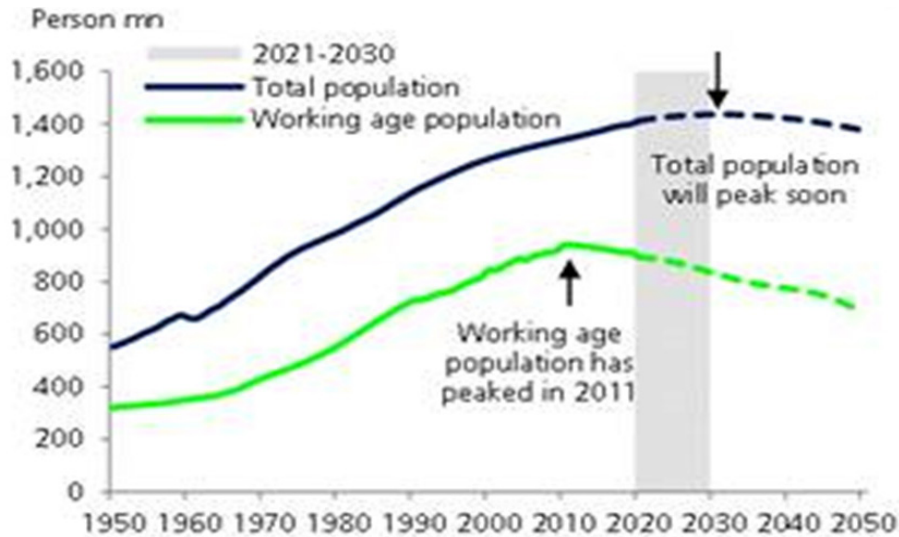
Source: National Bureau of Statistics

Exhibit 23: Real GDP Per Capita



Source: PWT9.1, Macquarie Macro Strategy, August 2021

Exhibit 24: China Population Trends



Source: CEIC, UNPD, Haver, UBS estimates

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India-based brokerage firm Edelweiss contrasts China's aging demographics with India, noting "Over 63,000 children are born in India every day, while China has less than half at 29,000. This results in China giving up its crown of the most populous nation to India after 300 years. Interestingly in 2050 China's median age will be 50 while the global median age will be 35. Within a decade of China's one-child policy the fertility rate dropped to 1.93 in 1991 (already below replacement rate) while India's was 3.96. Now, of every 1,000 babies born in the world, China has 80 while India has 172. India could have 40% more people than China, exactly 100 years since China has 40% more people than India."

While this year's summer chart pack reflects the macro and geopolitical risks that have led to the year-to-date equity selloff, it also shows the dynamic opportunity set across small caps within emerging markets. We are encouraged by recent performance trends of the asset class and continue to find many interesting growth stocks across a number of countries and sectors.

Until next month,



Chad Cleaver, Lead Portfolio Manager
Driehaus Emerging Markets Small Cap Equity Strategy

Notes // Driehaus Emerging Markets Small Cap Equity Strategy

FIRM DEFINITION

Driehaus Capital Management LLC (DCM) is a registered investment adviser with the United States Securities and Exchange Commission (SEC). DCM provides investment advisory services using growth equity and credit strategies to individuals, organizations, and institutions. The firm consists of all accounts managed by DCM (the Company).

DCM claims compliance with the Global Investment Performance Standards (GIPS®).

COMPOSITE DESCRIPTION

The Emerging Markets Small Cap Equity Composite (the Composite) was created in February 2016. An account is considered to be an emerging markets small cap equity account if it seeks to maximize capital appreciation through active investment primarily in a portfolio of emerging market traded equity and equity-convertible securities of smaller capitalization companies with perceived high growth potential.

PERFORMANCE RESULTS

Net of fee returns reflect the payment of advisory fees and in some instances, other fees and expenses such as administrative and custodian fees while the gross of fee returns do not. Both are net of brokerage commissions charged to the accounts and reflect the reinvestment of income and other earnings.

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Income tax may be withheld on income depending on the tax laws of each country and its treaty, if any, with the U.S. Such withholding taxes are reflected in the performance of accounts.

INDICES

The Morgan Stanley Capital International Emerging Markets Small Cap Index (MSCI Emerging Markets Small Cap Index) is a market capitalization-weighted index designed to measure equity market performance of small cap stocks in global emerging markets. Data is in US Dollars. The net dividend (ND) index is calculated with net dividend reinvestment.

The MSCI Emerging Markets Small Cap Growth Index is a subset of the MSCI Emerging Markets Small Cap Index and includes only the MSCI Emerging Markets Small Cap Index stocks which are categorized as growth stocks. Data is in US Dollars. The net dividend (ND) index is calculated with net dividend reinvestment.

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TERMS

Active share represents the share of portfolio holdings that differ from the benchmark index holdings. **Alpha** is the measure of performance on a risk-adjusted basis. Alpha takes the volatility (price risk) of a mutual fund and compares its risk-adjusted performance to a benchmark index. The excess return of the fund relative to the return of the benchmark index is a fund's alpha. **Beta** is a measure of a portfolio's volatility. A beta of 1.00 implies perfect historical correlation of movement with the market. A higher beta manager will rise and fall more rapidly than the market, whereas a lower beta manager will rise and fall slower.

Information Ratio (IR) measures a portfolio manager's ability to generate excess returns relative to a benchmark, but also attempts to identify the consistency of the investor. This ratio will identify if a manager has beaten the benchmark by a lot in a few months or a little every month. The higher the IR the more consistent a manager is and consistency is an ideal trait. **R-Squared** is a statistical measure that represents the percentage of a fund or security's movements that can be explained by movements in a benchmark index. For fixed-income securities, the benchmark is the T-bill. For equities, the benchmark is the S&P 500. **Sharpe Ratio** is calculated by finding the portfolio's excess return and then dividing by the portfolio's standard deviation. **Standard Deviation** is a measure of the average deviations of a return series from its mean; often used as a measure of portfolio volatility. A large standard deviation implies that there have been large swings or volatility in the manager's return series. **Tracking Error** is a divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark. This is often in the context of a hedge or mutual fund that did not work as effectively as intended, creating an unexpected profit or loss instead.

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