

MARKET GPS

EQUITY PERSPECTIVES

SEPTEMBER 2022

Featuring the latest quarterly insights from our investment teams:

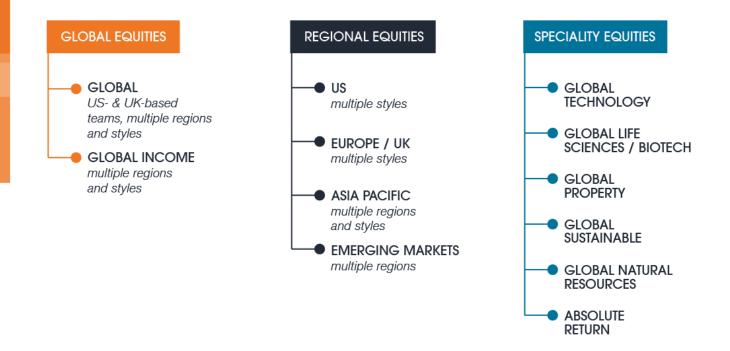
- US equities: Maintaining focus through a year of adjustments
- Navigating the energy crisis in Europe
- Health care strikes a balance
- Innovation a catalyst for growth in emerging markets

OUR EQUITY CAPABILITIES

Janus Henderson provides an active approach to equity investing. The equities platform is shaped by the belief that fundamental research is the foundation for delivering long-term, risk-adjusted returns to help clients achieve their financial goals. Independent thought and unique viewpoints are central to this approach and result in portfolios that are meaningfully different to an index. Each team expresses their individual, high-conviction ideas through processes that have evolved to suit their specific areas of the market and within robust risk control frameworks.

While operating with independence, the equities teams benefit from collaboration and shared research that provide a source of portfolio ideas. The culture encourages intellectual challenge and stimulating debate to test – and ultimately strengthen – investment thinking. The success of ideas is measured by overall client outcomes with the aim to deliver consistent, long-term risk-adjusted excess returns over benchmarks and peers regardless of the investment landscape. This effort is supported by award-winning, proprietary portfolio construction technology and a cultural emphasis on the client promise.

The equity teams, led by Co-Heads of Equities Alex Crooke and George Maris, include 164 investment professionals, responsible for US\$177 billion in assets under management, as of 30 June 2022. The teams include those with a global perspective, those with a regional focus – US, Europe, Asia Pacific and Emerging Markets – and those invested in specialist sectors. A range of growth, value and absolute return styles are employed.



US EQUITIES: MAINTAINING FOCUS THROUGH A YEAR OF ADJUSTMENTS

AUTHOR

 Jeremiah Buckley, CFA Portfolio Manager

Portfolio Manager Jeremiah Buckley discusses the state of U.S. equities and what to expect going forward.

Key takeaways

- The equity market readjusted aggressively in the first half of this year. Following a period of shuffling leadership and multiple compression, we remain confident that long-term, sustainable earnings growth will ultimately drive company value.
- Volatility rewarded some companies we think are secularly challenged, yet we continue to believe in the power of long-term shifts in technology use and the companies poised to benefit.
- Market turbulence has also readjusted the equity risk premium, which has reached more rational levels, with the market presenting long-term growth opportunities.

RESETTING THE EQUITY MARKET

The U.S. equity market readjusted aggressively in the first half of this year and has since recovered to some extent, but investors are still trying to assess what effects inflation – and the Federal Reserve's (Fed) response – will have on economic growth, and likewise, corporate earnings. What we have observed is that much of the market performance has been due to price-to-earnings (P/E) multiple contraction. Earnings estimates for the S&P 500[®] Index have not changed dramatically this year and, in fact, have continued to grow while the index price has dropped. In other words, while earnings are still growing, investors are now willing to pay less for those earnings.

BALANCING CONSUMER AND LABOR STRENGTH WITH RISING RATES AND INFLATION

While earnings have continued to grow (though more modestly), coming into the year we expected doubledigit growth given the strength of consumer and corporate balance sheets, which could support spending and investment to spur economic growth. At the time, personal saving rates remained elevated relative to recent history, boosted by COVID-related government stimulus and consumers' inability to spend on services due to the pandemic. Saving rates have since come down, driving a portion of consumer spending as those stimulus dollars are spent. At the same time, a shortage of labor since the beginning of the pandemic has inflated wages, also contributing to consumer strength. As illustrated in Figure 1, personal consumption expenditures have continued to grow despite tightening monetary policy from central banks.

The force of consumer strength has complicated the Fed's task of reining in inflation. Consumers are in a stronger position than in previous rate-hiking cycles, which has made it harder to predict the economic effects of higher rates. Recent employment numbers have shown an uptick in labor force participation, as workers return to a tight market, potentially alleviating some wage inflation. Signs of improving inflation could make the Fed less inclined to continue its hawkish bent, which could bode well for future economic growth. It remains to be seen how this balancing act will evolve as stimulus dries up and the Fed continues to tighten, but for now, consumers appear to be on relatively solid footing.

Figure 1: Personal consumption expenditures, saving rate, and hourly earnings growth (2007-2022)



Source: Federal Reserve Economic Data (FRED).

A CLOSER LOOK AT EARNINGS

Earnings estimates have moderated slightly, as shown in Figure 2, in the face of rapidly rising interest rates, higher commodity prices - particularly in energy - and a significantly stronger dollar, which has been a headwind specifically for multinational corporations, manufacturers, and exports. However, consensus earnings forecasts still assume strong growth for this year, following a double-digit year-over-year increase in S&P 500 earnings for the first half of the year. As a result of higher commodity prices, the composition of S&P 500 earnings has also shifted. While overall market earnings expectations have slowed. commodity-oriented and energy company earnings have seen a significant boost, driven in part by supply disruptions from the ongoing Russia-Ukraine conflict and following a period of general underinvestment in commodities by U.S. companies. On the downside, some retailers have been forced to mark down excess inventory as consumer spending - which tilted heavily toward physical goods during the pandemic - has shifted back to services faster than expected. While some of those retailers have reduced earnings

assumptions for the year, on a whole earnings estimates have remained relatively stable.

As seen in Figure 3, strong performance in the energy and utilities sectors has carried the S&P 500 returns this year. While other sectors have lagged, earnings in the coming year are expected to increase significantly for the benchmark as a whole and in areas such as communication services and consumer discretionary that have been punished significantly this year.

At the same time, many companies who have faced inflation from a strong dollar or higher commodity prices have been passing along cost increases to customers for the last few quarters. These increases tend to be sticky even after cost pressures ease, and companies are now seeing the benefits through higher sales and improving margins. We believe this has the potential to contribute to earnings growth in the second half of the year and through the first half of 2023, particularly if inflation moderates. So, while this year has seen a dramatic skew in performance toward energy and commodities-related companies in the index, we think that earnings growth can begin to drive stock returns in other areas of the market going forward.

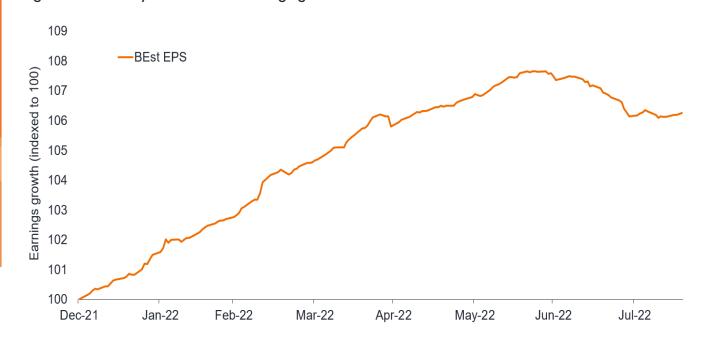


Figure 2: S&P 500 year-to-date earnings growth

Source: Bloomberg. BEst (Bloomberg Estimates) Earnings Per Share (EPS), blended 12 months.

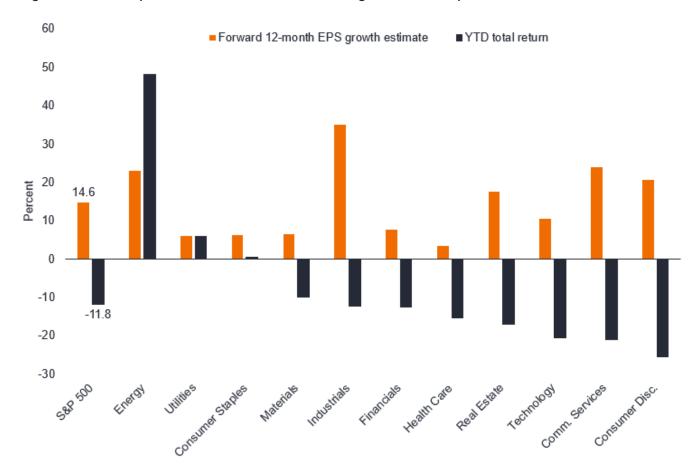


Figure 3: S&P 500 year-to-date returns and earnings estimates by sector

Source: Bloomberg, as of 1 September 2022.

GROWTH THEMES PERSIST

On top of multiple compression, the first half of 2022 was one of the worst periods of performance for growth stocks relative to value in the last decade. We don't expect this disparity to continue - we believe stock prices over time are driven by long-term sustainable earnings growth, and that companies able to grow earnings over time will benefit. We have written in the past about the power of long-term themes and companies poised to take advantage of secular shifts in the use of technology. While the investment backdrop has shifted meaningfully this year, we do not believe that the significance of these themes has changed. Specifically, companies using technology to improve data analytics around their customer relationships and to improve their products will continue to gain share and become more efficient over time. Companies with strong balance sheets and consistent cash flows that can invest through volatile macroeconomic periods like the current one will also position themselves for faster relative growth as we move toward a more normal investment environment.

We remain focused on growth companies within our target U.S. market. Many of the world's most successful technology companies are based in the U.S., and its economic environment has fostered a culture of growth and innovation. The U.S. equity market is also the largest in the world, with its companies accounting for over 40% of global market capitalization.¹ U.S. dividend growth showed exceptional resilience during the pandemic, and while it has lagged this year, this by no means implies weakness. Over 97% of companies increased their dividends or held them steady in the second quarter. At the same time, U.S. companies have increased share buybacks to funnel surging cash flow back to shareholders.

All in all, we believe in U.S. companies' ability to adapt and create value, and have seen this rewarded, particularly in recent years, as the U.S. market has outperformed other global markets.

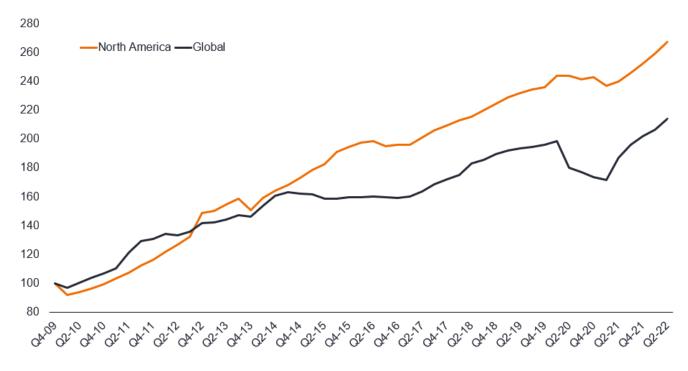


Figure 4: Janus Henderson Global Dividend Index - North America

Source: Janus Henderson. The Janus Henderson Global Dividend Index (JHGDI) is a long-term study into global dividend trends. It measures the progress global firms are making in paying their investors an income on their capital.



Figure 5: U.S. and global index performance

Source: Bloomberg, as of 31 August 2022. Cumulative returns rebased to 100.

WEIGHING OPPORTUNITIES AS RISK/REWARD SHIFTS

Market turbulence this year has readjusted the equity risk premium and our view on the relative attractiveness of stocks versus bonds in the current environment. As growth has moderated, uncertainty has increased, and nominal yields have risen, the risk/reward trade-off has become more balanced compared to last year, when risk/reward strongly favored equities. That said, the equity risk premium has also reached more rational levels. Overall, we believe volatility like we have experienced this year can create dislocations between price and value. As company valuations and risk/reward continue to adjust, perceptive investors may be able to capitalize on the opportunities the market is now offering.

¹Source: World Federation of Exchanges, Securities Industry and Financial Markets Association (SIFMA) estimates.

Commodities (such as oil, metals and agricultural products) and commodity-linked securities are subject to greater volatility and risk and may not be appropriate for all investors. Commodities are speculative and may be affected by factors including market movements, economic and political developments, supply and demand disruptions, weather, disease and embargoes.

Correlation measures the degree to which two variables move in relation to each other. A value of 1.0 implies movement in parallel, -1.0 implies movement in opposite directions, and 0.0 implies no relationship.

Diversification neither assures a profit nor eliminates the risk of experiencing investment losses.

Duration can also measure the sensitivity of a bond's or fixed income portfolio's price to changes in interest rates.

Fixed income securities are subject to interest rate, inflation, credit, and default risk. The bond market is volatile. As interest rates rise, bond prices usually fall, and vice versa. The return of principal is not guaranteed, and prices may decline if an issuer fails to make timely payments or its credit strength weakens.

Growth and value investing each has their own unique risks and potential for rewards, and may not be suitable for all investors. Growth stocks are subject to increased risk of loss and price volatility and may not realize their perceived growth potential. Value stocks can continue to be undervalued by the market for long periods of time and may not appreciate to the extent expected.

MSCI All Country World ex USA IndexsM reflects the equity market performance of global developed and emerging markets, excluding the U.S.

MSCI Europe Indexs[™] reflects the equity market performance of developed markets in Europe.

Price-to-Earnings (P/E) Ratio measures share price compared to earnings per share for a stock or stocks in a portfolio. The Forward PE ratio uses the forecasted earnings per share of the company over the next 12 months for calculating the price-earnings ratio.

S&P 500[®] Index reflects U.S. large-cap equity performance and represents broad U.S. equity market performance.

Technology industries can be significantly affected by obsolescence of existing technology, short product cycles, falling prices and profits, competition from new market entrants, and general economic conditions. A concentrated investment in a single industry could be more volatile than the performance of less concentrated investments and the market as a whole.

The Fed, or Federal Reserve is the central banking system on the United States.

Volatility measures risk using the dispersion of returns for a given investment.

NAVIGATING THE ENERGY CRISIS IN EUROPE

AUTHOR

 John Bennett Director of European Equities | Portfolio Manager

John Bennett, Director of European Equities, explains why he believes oil prices will remain higher for longer, and what this means for investors.

Key takeaways

- Oil remains the best-performing sector in Europe since the start of the year, yet Energy represents a depressed weighting in global equity indices relative to physical market value.
- In our view, a restricted oil supply and resilient demand are supportive of higher-for-longer oil prices.
- An orderly transition to net-zero carbon will rely on oil and gas companies to set realistic strategies and targets and we prefer to work with these companies to achieve these goals.

If Europe wasn't hated in the investment world before, it certainly is now. After six months of war in Ukraine with no signs of ceasefire, a pending recession, and a deepening energy crisis, the sentiment is understandable. But where some see doom, we see opportunity. As active investors, we seek value where the market is in retreat. This has been the case for oil and gas for a while now, and Russian President Vladimir Putin's actions (not least using the Nord Stream 1 pipeline as a bargaining chip against Europe) have served to exacerbate matters.

There is currently a large disparity between the fundamentals of many oil majors and their valuations, and oil remains the best-performing sector since the start of the year. Despite this, the sector sits at a consensual underweight in many portfolios and its representation in global indices is far lower today than its market value suggests it should be – Figure 1. While fears of deep recession have sporadically hit the oil price, as was the case most recently in the second week of September, our view is that prices will remain higher for longer.¹

Recently we have seen other investors gravitate towards this view, especially – and not without irony – those branded as sustainability fund managers. In August, Citywire reported a number of sustainable funds with an increasing exposure to big oil. This is especially interesting as the rigid/purist approaches we have seen to fossil fuels by many of these funds has in part caused the huge misallocations of capital and dislocations we currently find in the sector.

So, what evidence is there to support a 'higher for longer' oil price? Simple supply and demand economics suggests that if supply remains restricted and demand remains robust, prices will remain high.

SUPPLY IS CONSTRAINED

• From the ground up

In addition to the lack of gas supply from Russia, Putin's current weapon of choice against Europe, supply is waning from the ground up. Organisation of the Petroleum Exporting Countries (OPEC) member countries produce around 40% of the world's crude oil.² OPEC is currently working at close to capacity, and its recent decision to cut crude supply to prop up prices will intensify these supply constraints.

Elsewhere, US shale growth is not increasing. Shale is typically short-cycle, meaning that ramping up production can be quickly achieved by taking oil from drilled-but-uncompleted wells. However, the number of shale wells awaiting completion has fallen sharply since highs in 2020. As a result, the latent potential of shale has shrunk. Combined with shortages in oilfield equipment and labour, the ability for shale to make up for any loss of supply has waned.³

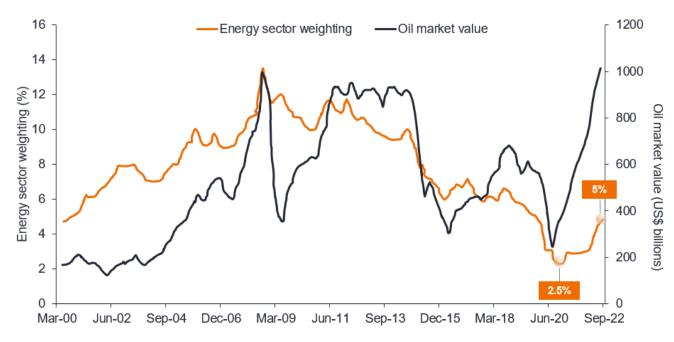


Figure 1: Energy sector positioning remains low

Source: Alliance Bernstein, Janus Henderson Investors, as at 24 August 2022.

• Big oil remains disciplined on oil extraction

After years of pressure from all angles, oil majors are now committed to reducing oil production and transitioning to alternative fuel types to meet climate pledges. As a result, oil extraction is slowly but surely reducing. With many oil majors remaining determined to reach their sustainability goals, it does not appear that these commitments will be compromised any time soon.

Decades-long underinvestment in energy

In 2020, around 40% of the European Union's (EU's) gas was imported from Russia, with Germany and Italy particularly reliant on those supplies, having imported 65% and 43%, respectively⁴ – a damning reflection on the past two decades of underinvestment in energy on the continent. Fortunately, we have noted a paradigm shift in Europe towards greater localisation of supply chains and tangible investment into energy, infrastructure, and defence since the invasion of Ukraine.

The European Commission's REPowerEU initiative targets an approximate doubling of the renewable

incremental capacity by 2030 and to increase the deployment rate of renewables by 20%.^{5,6} While this may be a good step forwards, it will take time to achieve. In the near-term investment in oil and gas production is essential.

DEMAND IS ALIVE

• How much can depth curb demand?

The market fears that a deep recession could significantly curb demand for oil and gas as businesses struggle to stay afloat and individuals rein in spending habits. These fears were reflected in the oil price in June, and again in September amid renewed fears which saw prices drop to below levels seen prior to Russia's invasion of Ukraine – Figure 2.

While we expect that a recession will see demand fall, we do not agree with the extreme scenarios which suggest that demand for oil will entirely dry up. After all, energy is still essential even in the deepest of recessions for the production of food, the running of hospitals, and the heating of homes.



Figure 2: Recessionary fears drive oil prices temporarily lower

Source: Bloomberg, Janus Henderson Investors, Brent Crude Oil prices denominated in euros, as at 13 September 2022.

• Oil and gas is part of the solution

We place significant value on the oil and gas industry over the medium- and long-term as Europe transitions to a green economy. It is unreasonable to withhold investment from oil and gas companies which are vital in the day-to-day running of our societies, and which are central to making long-term changes. As active investors we focus on where a company is going, not where it has come from. An orderly transition to netzero carbon will rely on the largest, most-polluting companies to set realistic strategies and targets and we prefer to work with these companies to achieve these goals.

WHAT DOES THIS MEAN FOR INVESTORS?

At the time of writing, European equities are trying to price what a winter of gas rationing and further elevated gas prices means for the various industries and households that are located on the continent. There is no doubt that the rest of the year will be volatile, but we believe that opportunities will present themselves to add to existing positions or enter new names where the valuation and fundamentals disconnect – this is certainly the case for many oil and gas names

¹ Bloomberg, Brent Crude Oil prices, as at 13 September 2022.

² US Energy Information Administration, as at 7 September 2022.

- ³ Reuters, 'U.S shale shortages to limit efforts to replace banned Russian oil', as at March 2022
- ⁴ Eurostat, DUKES, Jefferies Estimates, 2020.
- ⁵ European Commission, REPowerEU initiative, Janus Henderson Investors, 8 March 2022.

⁶ Ember Climate Insights, 'Shocked into action', June 2022.

Concentrated investments in a single sector, industry or region will be more susceptible to factors affecting that group and may be more volatile than less concentrated investments or the market as a whole.

Foreign securities are subject to additional risks including currency fluctuations, political and economic uncertainty, increased volatility, lower liquidity and differing financial and information reporting standards, all of which are magnified in emerging markets.

Increased portfolio turnover may result in higher expenses and potentially higher net taxable gains or losses.

Net zero refers to greenhouse gas production being balanced by removal from the atmosphere.

Natural resources industries can be significantly affected by changes in natural resource supply and demand, energy and commodity prices, political and economic developments, environmental incidents, energy conservation, and exploration projects.

HEALTH CARE STRIKES A BALANCE

AUTHOR

 Andy Acker, CFA Portfolio Manager

Portfolio Manager Andy Acker says the health care sector could now be well positioned to offer both defense against market volatility and opportunities for long-term growth.

Key takeaways

- The health care sector has outperformed the broader equity market in 2022, thanks to the pricing power and non-cyclicality of firms such as pharmaceuticals and managed care providers.
- Those attributes could continue to stand out as interest rates rise and inflation remains elevated. But at the same time, green shoots are beginning to appear in areas of health care that have underperformed, particularly biotech.
- Attractive valuations, positive clinical trial outcomes, and clarity around drug pricing reform could help propel biotech higher following a historic drawdown in the subsector.

So far in 2022, the defensive nature of health care has been the sector's dominant story, with the S&P 500° Health Care sector returning -5.7% for the year compared to -14.3% for the S&P 500° Index.¹ With interest rates expected to keep rising and economic growth potentially slowing, the pricing power and non-cyclicality of areas such as pharmaceuticals and managed care could continue to stand out. But at the same time, health care's innovation engine is humming along – and showing signs of attracting investor attention.

AHEAD OF EXPECTATIONS

Within health care, the year's best-performing stocks fall into categories such as managed care, large-cap biopharmaceuticals, and distributors and pharmacy benefit managers. These industries are generally able to pass on price increases and benefit from steady demand. In managed care, for example, pricing for insurance policies resets annually, allowing companies to raise premiums in response to higher costs. In addition, proceeds invested in short-duration securities are rolled over as policies renew, making it possible to capitalize on rising rates. Meanwhile, consistent demand for medicines supports strong free cash flows and balance sheets among pharmaceuticals. The industry also has many levers to pull to reduce

Figure 1: Health care plays defense in 2022

expenses and can lift drug prices. Drug price increases also support distributors and pharmacy benefit managers (which form the supply chain of drug distribution in the U.S.). The profit margins of these firms are tightly correlated with pharmaceutical pricing and volume trends.

Combined, these companies have generally delivered solid earnings growth this year and are the main reason why health care reported the second-largest positive differential between actual earnings and estimates in the second quarter, according to FactSet.²

LONG-DURATION HEADWINDS

On the other hand, long-duration companies within health care – firms whose cash flows tend to be realized further out in the future – have underperformed as interest rates tick up. Rising costs and COVID-19 disruptions have also been challenges for some areas of the sector. For example, health care providers, such as hospitals, have yet to see patient volumes return to pre-COVID levels due to nursing and labor shortages. Similarly, medical device companies have suffered from lower volumes, and with limited pricing power and supply disruptions, profit margins have come under pressure.



Source: Bloomberg, data from 3 January 2022 to 9 September 2022. Indices rebased to 100 as of 3 January 2022.



Figure 2: Total enterprise value* of development-stage biotech, 8 February 2021 to 30 June 2022

Biotech's aggregate enterprise value has declined as much as 70% since 2021.

Source: Capital IQ, as of 30 June 2022. *Enterprise value is the sum of a company's market capitalization, preferred stock and debt, minus cash and cash equivalents and is meant to be a measure of a company's market value (what the cost would be to acquire a firm).

One of the largest underperformers has been biotechnology, with the group's small- and mid-cap stocks mired in an unusually deep and protracted pullback. From February 2021 through a low in early May 2022, the S&P Biotechnology Select Industry Index, a benchmark for the subsector, fell 64%, underperforming the S&P 500 by 66% and the S&P 500 Health Care sector by 75% – the largest relative gap since the Biotechnology Select Industry Index's inception in early 2006. In fact, at one point more than 200 companies were trading below the value of cash on their balance sheets. We also found many more companies trading at what we believed to be zero or negative pipeline value.

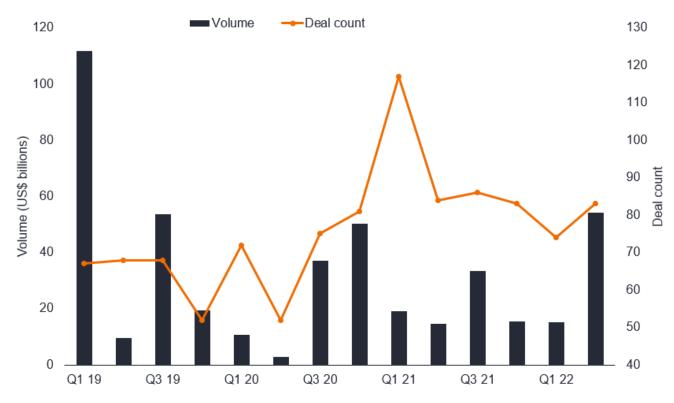
GREEN SHOOTS

In our view, such pricing does not make sense, and we are seeing early signs of recovery. Merger and acquisition (M&A) activity, for one, has started to pick up, including several multibillion-dollar deals announced in the last few months. These include Pfizer's recently announced acquisitions of Biohaven Pharmaceuticals (for nearly \$12 billion, a roughly 80% premium) and Global Blood Therapeutics (for over \$5

billion, a more than 100% premium). With many pharmaceutical companies facing patent expirations for blockbuster drugs³ over the next decade, we believe more deals are likely.

Investors are also starting to reward positive clinical trial data again. In August, Alnylam reported positive top-line results from its phase 3 study for an investigational RNAi treatment for transthyretinmediated amyloidosis, a hereditary condition that can lead to organ failure, and in September, Akero Therapeutics delivered strong phase 2 data for its treatment for NASH, a serious form of fatty liver disease that affects over 10 million patients in the U.S. In both cases, the stocks rose significantly following the data releases. We expect more readouts in the coming months, including for Alzheimer's disease, cancer, and obesity. Meanwhile, the first gene therapy for hemophilia was recently approved in Europe, and in the coming months, we expect a regulatory filing for the first gene therapy for Duchenne muscular disease, an often-fatal genetic disease that afflicts tens of thousands of children. We believe these represent potentially large end markets that could drive sustained revenue growth for the sector for years to come.

Figure 3: M&A activity picks up in biotech.



Source: Bloomberg, as of 13 September 2022.

ONE LESS OVERHANG

Already, the S&P Biotechnology Select Industry Index is up more than 30% since early May.⁴ Whether biotech can maintain that upward momentum remains to be seen. Rising interest rates, elevated inflation and other macroeconomic factors could continue to stir up volatility.

Still, more green shoots are emerging. In August, the Inflation Reduction Act of 2022 was signed into law in the U.S. The legislation, which introduces changes to drug pricing, removes what has been a source of uncertainty for health care for more than six years. In our view, the bill is better than feared, including positives such as reducing out-of-pocket costs for seniors and only allowing drug price negotiation to begin after an extended period on the market. The one major drawback, we feel, is the differential in treatment between oral medicines and biologics (injectable drugs). While drug price negotiation for biologics would not start until 13 to 15 years after commercial launch, the grace period for small molecule pills is only nine years. We believe this shorter window could discourage investment in much-needed areas such as oral cancer therapies.

Hopefully, this legislative flaw can be addressed before having an adverse impact. But overall, we believe the reform is manageable, with only a modest impact over the next decade on the industry (estimated by the Congressional Budget Office at roughly 2% of total biopharma revenues⁵). Most importantly, it eliminates what had been a significant overhang for the sector – and is hopefully a sign of more positive things to come for health care.

¹Bloomberg, data from 3 January 2022 to 9 September 2022. The S&P 500 Health Care sector comprises those companies included in the S&P 500 that are classified as members of the GICS® health care sector.

²FactSet, data as of 5 August 2022.

³A blockbuster drug is a medicine with annual sales of US \$1 billion or more.

⁴Bloomberg. Data from 11 May 2022 to 13 September 2022.

⁵Congressional Budget Office Cost Estimate, as of 15 July 2022.

Health care industries are subject to government regulation and reimbursement rates, as well as government approval of products and services, which could have a significant effect on price and availability, and can be significantly affected by rapid obsolescence and patent expirations.

S&P 500[®] Biotechnology Select Index reflects the performance of companies primarily engaged in the research, development, manufacturing and/or marketing of products based on genetic analysis and genetic engineering.

S&P 500[®] Index reflects U.S. large-cap equity performance and represents broad U.S. equity market performance.

INNOVATION A CATALYST FOR GROWTH IN EMERGING MARKETS

AUTHORS

- Matthew Culley Portfolio Manager | Research Analyst
- Daniel J. Graña, CFA Portfolio Manager, Emerging Market Equity

While the pandemic has increased near-term risk, the rise of innovative and value-added industries should place the trajectory of emerging markets on more stable footing, Daniel Graña and Matt Culley argue.

Key takeaways

- Long fueled by the drivers of "convergence" and "outsourcing," we believe emerging markets will increasingly rely upon value-added innovation for economic growth.
- A young talent pool is leveraging technological advancements to provide solutions to unique, local business frictions.
- Innovative EM companies stand to become global leaders as they tap their large domestic markets and adapt their businesses to other regions, including developed economies.

Emerging markets (EM), in our view, remain one of the more compelling themes in equities investing, but perhaps for reasons not fully appreciated by investors. At present, EMs as gauged by leading benchmarks encapsulate 24 countries and more than half the world's population. We think the size and growth rates of these regions alone should merit investors' attention.

Despite these countries' diverse social, economic, and political structures, over the years there has been surprising similarity in the underlying themes and opportunities for EM equities investment. Consistent with their "emerging" status, historically there have been two primary reasons for gaining equity exposure to EMs: outsourcing and convergence. With respect to the former, EMs have been a major beneficiary of the drive toward globalization as developed markets look for lower-cost ways to unearth and refine raw materials, manufacture products, and provide services. As incomes in EMs rise, so too does the demand for cars, smartphones, life insurance, and other middle-class outlays that drive convergence toward developed market penetration rates. These two factors have been the principal forces behind the impressive performance of several EM commodities, manufacturing, and outsourced services stocks over the past two decades.

AND NOW THERE ARE THREE

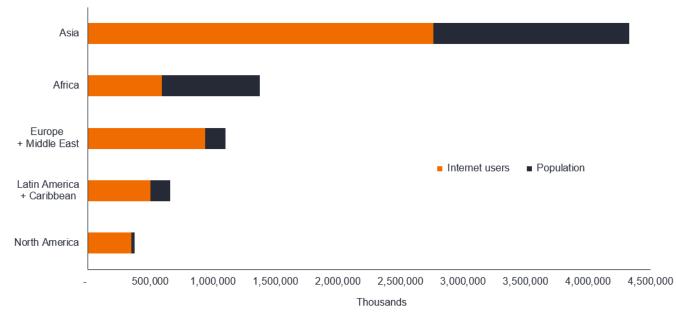
While outsourcing and convergence remain core pillars of the EM opportunity set, we have begun to see the emergence of innovation as a third investable EM meta-theme. The last decade has witnessed innovative EM companies such as Alibaba and Tencent growing to become some of the largest companies in the world. We expect other companies to follow suit and believe that we are at the precipice of a broadening of EMoriginated innovation that has the potential to reshape the social and economic order around the world.

The global economy is entering an unprecedented time for innovation. The so-called Fourth Industrial Revolution is enabling the homogenization of the physical, digital, and biological world. Importantly, these advancements are no longer the exclusive domain of developed markets. Instead, these global forces are coalescing to drive innovation in EMs as well.

The undercurrents that aided the outsourcing and convergence stories of the past decades – combined with consumer technology proliferation and Internet penetration – have set the stage for a profound change in how and where innovation happens. We are not alone in recognizing that demographics strongly favor EMs, given their materially younger populations and a shift in consumption toward the rapidly expanding generation of middle-class, digitally native consumers.

Figure 1: Global Internet users by region

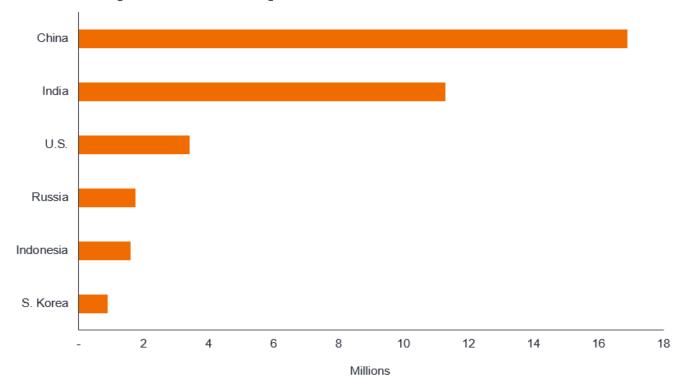
Asia leads the word in Internet users, many of whom are younger, digitally native consumers who rely upon connectivity for many aspects of their professional and social lives.



Source: Internet World Stats, as of 31 March 2021.

Figure 2: University enrollment in STEM curricula (millions)

Major Asian emerging markets are training students in science, technology, engineering, and math curricula at a higher rate than other regions.



Source: Bloomberg, as of 2021.

Emerging countries are educating students in science, technology, engineering, and mathematics at a faster pace than any other region. These graduates are entering the workforce with the sum of nearly all information known to mankind at their fingertips. In contrast to years past, they are increasingly looking away from Western markets and toward home, seeing the combination of opportunity and resources available to build viable businesses that tackle local market challenges. This has led to scaled pools of talent, experienced entrepreneurs, and abundant venture capital to form the backdrop for sustained innovation for decades to come. Artificial intelligence (AI), Big Data, 5G, blockchain, nanotechnology, biotechnology, the Internet of Things (IoT), and guantum computing represent some of the enabling technologies supporting the transformation of human lives and enterprises that we are beginning to see originate out of the emerging world.

A SPRINGBOARD FOR PRODUCTIVITY

We were struck by a recent conversation with a South Korean entrepreneur who noted that true innovation breaks trade-offs by eliminating the higher friction and stacked economics common of legacy market structures in EMs. Regulatory and business formation constructs developed over time to favor incumbents and stifled the competitiveness of small- and mediumsize businesses. Technological advancement has the potential to shatter this unproductive paradigm. What has become so salient in EMs is that these innovations are driving inclusion – one of the most powerful forces in unlocking demand globally and an essential ingredient for economic growth. By broadening access and enabling participation by EM populations that are under- or unserved by existing institutional structures, innovation is adding benefits that are inherently different and complementary to the convergence and outsourcing stories of past decades.

Entrepreneurial fintech businesses are bringing an unbanked population into the financial system with the potential to elevate millions out of poverty. The application of blockchain technology across supply chains is enabling access to credit to an enormous group of underserved small businesses and could help alleviate failure rates that are much higher than in developed markets. Importantly, the shifting landscape for innovation is similarly enabling a positive environmental impact. Rather than balancing the inherent trade-off between economic growth and environmental harm, many innovators have made sustainability a positive input to their business model, rather than a negative output to be managed. This flips traditional environmental, social, and governance (ESG) investing on its head.

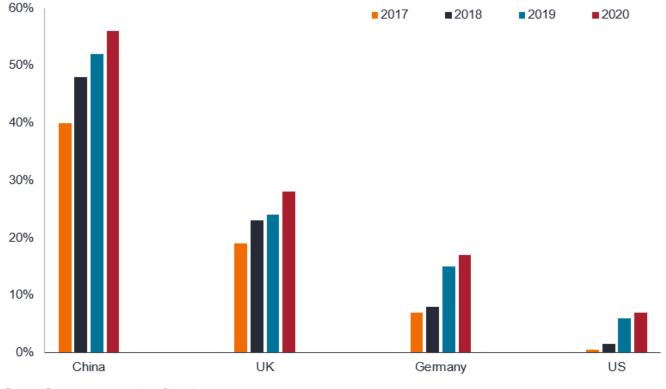
LOCAL SOLUTIONS TO LOCAL CHALLENGES

Many business models prevalent in EMs have been imported from developed markets where they were forced to overcome intense competition to create differentiation by solving local market frictions. With the greater ease in which technology is diffused globally, an increasing number of businesses are finding their way into EMs - with varying degrees of success. Emerging markets have a long history of leapfrogging legacy technology generations, such as mobile superseding networking traditional wireline communication. But in many cases, we are presently seeing a complete bypass of traditional development, which is resulting in innovation scaling faster. Food delivery has grown at a dramatically rapid pace in China and penetration now stands far in excess of developed markets. In India, where restaurant penetration remains but a fraction of the Western world, with limited selection, we are seeing a strong adoption of cloud kitchens alongside the expansion of the major food delivery platforms. This has the dual benefits of increasing supply and selection for underserved consumers and also enabling enormous job growth in what has historically been a difficult industry for small business owners.

In Latin America, Brazilian logistics have long been underdeveloped, resulting in elongated and costly supply chains dominated by the state-run postal service and fragmented middlemen. Today, we are seeing the emergence of multiple digitally enabled logistics companies that are providing on-demand, intra-city services. Digital freight matching platforms are also on the rise. These companies pair shippers and truckers to significantly increase the efficiency and speed for the shipper and provide higher wages for drivers, all while circumventing the need to build the traditional multi-modal supply chain conglomerates prevalent in the U.S. and other developed markets.

Figure 3: Food delivery service users as a share of Internet users by region

The proliferation of food delivery in China vis-à-vis developed markets illustrates how seamlessly many of the country's citizens have adapted to the digital economy.



Source: Company presentations, Bloomberg.

HEALTHCARE JOINS THE FRAY

As emerging markets compound their demographic advantages in education, we are seeing an explosion of new and innovative companies across the health care ecosystem. Increasingly, even Western-educated EM citizens are returning home to establish startups. Rather than joining well-known global leaders, or developing outsourced generic drug manufacturing facilities, true innovation is happening domestically. We recently spent time with the founder of a colorectal cancer screening company who has developed a patented technology to provide world-leading accuracy at costs that are a fraction of those in developed markets. While initially providing benefits for an at-risk population of 700 million in its home market, there are enormous opportunities to provide this technology on a global basis. With the lack of sufficient access to healthcare infrastructure across many countries, we

are increasingly seeing unique business models emerging to utilize technology to address these gaps. By integrating telemedicine, e-pharmacy, digital recordkeeping, educational content, and AI-assisted decision making for providers, EM innovators are creating scalable solutions that create not only powerful business models, but more importantly, drive inclusion of the underserved into the health care ecosystem.

GOING GLOBAL

Perhaps most exciting is the opportunity for many of these businesses to scale beyond local-to-local innovations and into local-to-global solutions providers. Many of the complex issues EM innovators have solved for can be applied back to developed markets to improve existing solutions that didn't require breaking trade-offs.

Figure 4: Annual new drug approvals in China

Chinese regulators have accelerated drug approvals with the objective of improving the health outcomes and quality of life of the country's citizens, an aim that aligns with government policy.



Source: Jefferies, China NMPA.

We recently met with an emerging market software company that provides solutions to global multinationals seeking to grow their e-commerce operations in EMs. These global enterprises needed a solution that integrates multiple fragmented logistics providers, horizontal e-commerce marketplaces, brickand-mortar stores, local banks, payment schemes, currencies, and many other ecosystem partners in a flexible, cloud-based solution. By providing this service across Latin America, this company has become recognized as a global leader by market intelligence firms and is increasingly expanding along with its customers into developed markets by displacing legacy models. This is just one of many differentiated companies that are beginning to arise across EMs that will have global implications.

We expect EM innovators to reshape the global equities investing landscape. Benefiting from deep local markets, improving scale of engineering, and executive talent, we expect many more EM-domiciled companies to break into the ranks of both the largest (and most important) companies in the world over the decade. Successful identification and coming partnership with these companies has the potential to allow for substantial compounding of capital over long time periods. While these preconditions for a wave of EM-oriented innovation are coalescing today, the underlying drivers are durable, suggestive that this dynamic will likely become the new norm, and in the process, likely help many EM countries circumvent the middle-income trap that has previously hampered early waves of development.

Emerging market investments have historically been subject to significant gains and/or losses. As such, returns may be subject to volatility.

Environmental, Social and Governance (ESG) or sustainable investing considers factors beyond traditional financial analysis. This may limit available investments and cause performance and exposures to differ from, and potentially be more concentrated in certain areas than, the broader market.

Foreign securities are subject to additional risks including currency fluctuations, political and economic uncertainty, increased volatility, lower liquidity and differing financial and information reporting standards, all of which are magnified in emerging markets.

Health care industries are subject to government regulation and reimbursement rates, as well as government approval of products and services, which could have a significant effect on price and availability, and can be significantly affected by rapid obsolescence and patent expirations.

Technology industries can be significantly affected by obsolescence of existing technology, short product cycles, falling prices and profits, competition from new market entrants, and general economic conditions. A concentrated investment in a single industry could be more volatile than the performance of less concentrated investments and the market as a whole.

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