



MARKET GPS

EQUITY PERSPECTIVES

MARCH 2022

Featuring the latest quarterly insights from our investment teams:

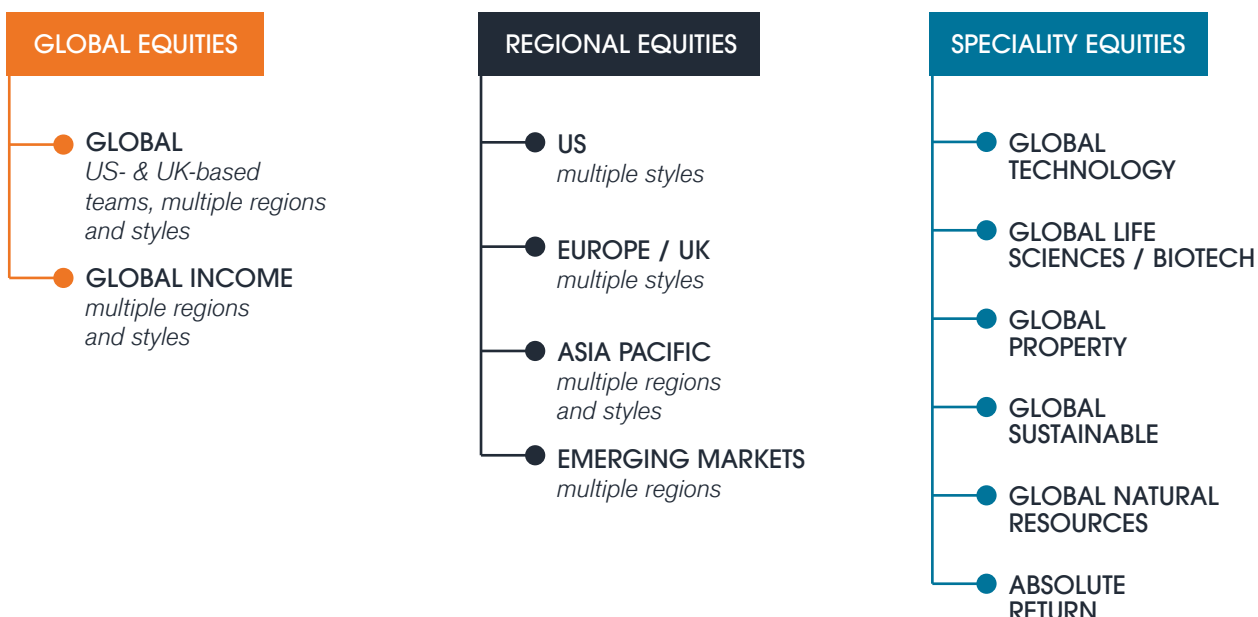
- ▶ Revisiting U.S. growth in a challenging environment
- ▶ How do ESG factors impact valuations within the technology sector?
- ▶ An investor's China conundrum
- ▶ Can biotech bounce back?

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 160 investment professionals, responsible for US\$244.3bn in assets under management¹. 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.



¹ Source: Janus Henderson, as at 31 December 2021.

A climber with a red backpack and ice axes is seen from behind, ascending a steep, snow-covered mountain peak. The sky is a soft, hazy orange, suggesting dawn or dusk. The mountain's ridges are sharp and jagged, covered in patches of snow and ice.

REVISITING U.S. GROWTH IN A CHALLENGING ENVIRONMENT



Doug Rao



Brian Demain

Portfolio Managers Doug Rao and Brian Demain discuss the changing market environment for growth equities – from the Russia/Ukraine conflict to repercussions developing from the COVID policy response.

Key takeaways

- » Market volatility has spiked as investors weigh the effects of the Russia/Ukraine conflict, rising inflation and other long-term effects of the powerful fiscal and monetary pandemic response.
- » Inflation – from goods, wages and commodities – and the potential for higher interest rates will affect growth equity earnings and the multiples that investors are willing to pay for them.
- » As the market environment evolves, Doug and Brian remain focused on durable investment themes, but also companies with the potential to outgrow the headwinds of inflation and higher rates.

Recent volatility has clearly signaled that investors are sorting through the potential for protracted military action in Ukraine and the economic implications of the West's sanctions on Russia. While the conflict in Ukraine has become front and center for markets, investors are also faced with the long-term impacts of the monetary and fiscal response to the pandemic. The prospect of persistent inflation is certainly one of the most central concerns. We think it is helpful to break inflation into two components – goods inflation and wage inflation – to better understand the underlying dynamics.

Goods inflation

At the onset of COVID, central banks and governments flooded markets with monetary and fiscal stimulus, and, as a result, consumer spending skyrocketed. More precisely, spending on goods (as opposed to services) rose sharply, as travel restrictions and health concerns prevented consumers from accessing the physical economy. Prior to the pandemic, goods purchases were roughly 31% of total Personal Consumption Expenditures (PCE) in the U.S. but have climbed and now remain at over 35%. This demand increase combined with snarled supply chains has driven up goods prices, resulting in the elevated inflation numbers that we have seen in recent months (Exhibit 1).

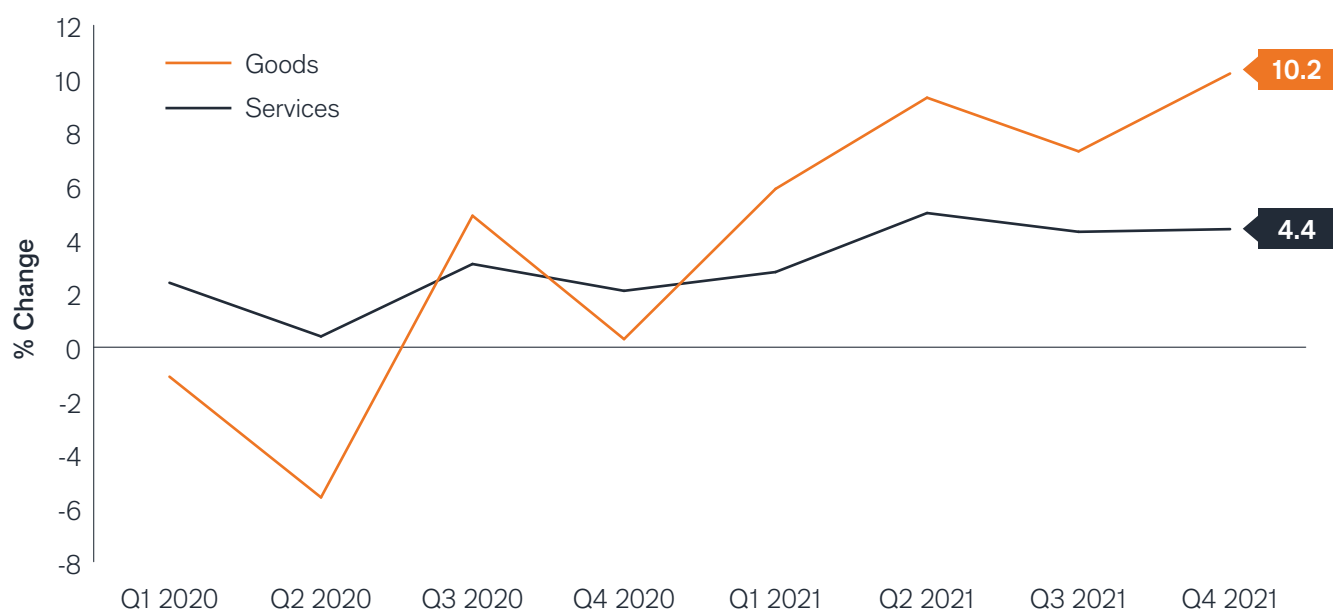
Russia's military action in Ukraine has since created a massive spike in commodities prices as countries

reconsider their reliance on Russian raw materials and the conflict chokes off supply. Oil and natural gas prices have been some of the most visible areas, but Russia is also a major supplier of metals such as nickel, steel and aluminum. Russia and Ukraine are leading exporters of grains such as wheat and corn, and fertilizer materials such as potash and phosphates. A crimp on these supplies has the potential to significantly affect food security and crop yields – and, thus, prices – in coming years.

The ultimate impact and duration of the conflict remain unknown, but significant spikes in commodities prices – particularly crude oil – could trigger a recession. While the effects of inflation and added disruption to supply chains will spread through the U.S. economy in various ways, the resulting higher prices act as a tax on consumers, hindering their ability to spend on other goods and services and grow the economy. As markets dip, consumers could be further impacted by the wealth effect as the value of their assets decline.

The increased pressure on consumers and the potential for recession will complicate the U.S. Federal Reserve's (Fed) already difficult task of reining in inflation without disturbing the economic recovery. If the COVID situation continues to improve and supply chains can be repaired, we could see price moderation and higher services spending – more in line with pre-pandemic norms. However, a prolonged Russia/Ukrainian conflict will continue to keep inflationary pressure on goods.

Exhibit 1: U.S. personal consumption expenditures (PCE) inflation



Source: U.S. Bureau of Economic Analysis, as of 7 March 2022, % Change from Preceding Period in Prices, Seasonally Adjusted at Annual Rates.

Wage inflation

At the same time, we believe inflation from lower-income wages will be sustained. For the last several decades, globalization kept a lid on low-end wages in the U.S., as we imported inexpensive goods and jobs were moved offshore to lower-paying countries. However, more recently, the U.S. is retrenching away from globalization and is in the process of re-industrialization, which has likely accelerated as the West de-couples from Russia. This, along with sharply lower labor participation rates due to the pandemic, has led to rising wages. Higher pay could be generally positive for the U.S. economy, as consumer spending accounts for a majority of gross domestic product (GDP), and workers will have more money to spend. However, the secular repricing of low-end wages will create some headwinds on margins for companies in coming years.

Inflation and higher rates – implications for growth companies

Over the next three to five years, we believe inflation and, similarly, interest rates, will matter for growth equity valuations. Since the Global Financial Crisis, we have enjoyed an extended period of both very low interest rates and inflation, during which historically low rates have incentivized investors to pay more for growth

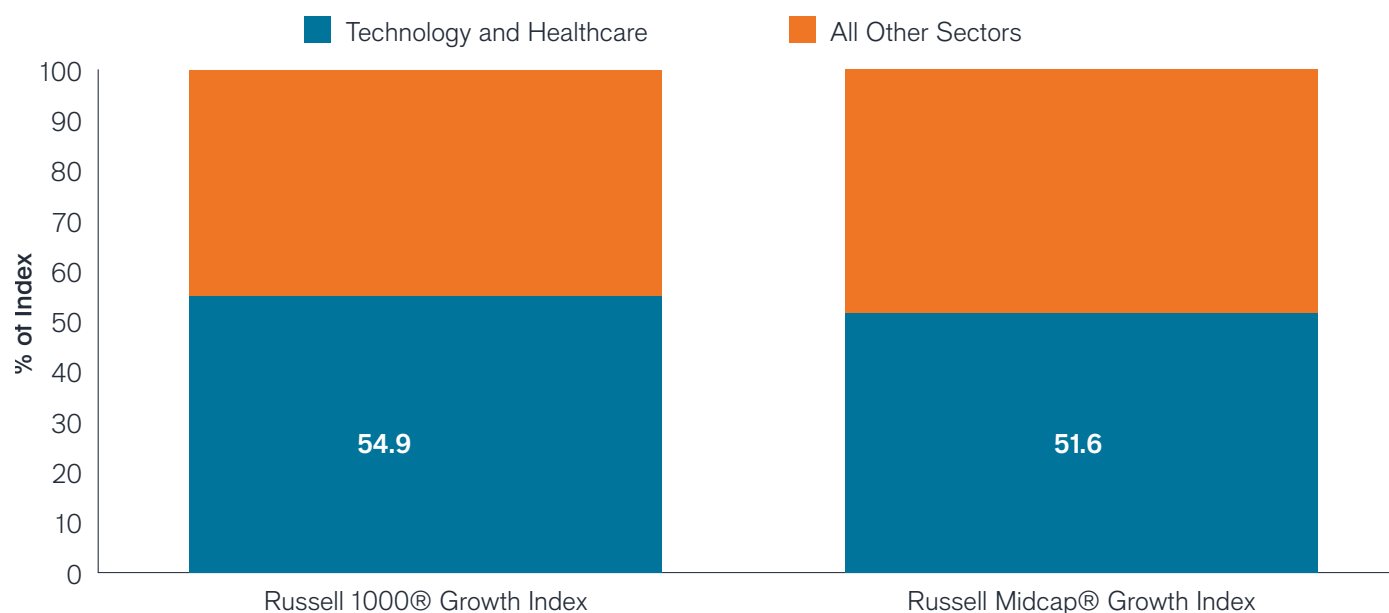
companies. This dynamic can change quickly as interest rates – and, therefore, discount rates – increase, particularly for high-growth companies with expected cash flows far out in the future.

Stock prices are a function of earnings, earnings growth and the multiples investors are willing to pay for that earnings and earnings growth. We fully expect that if rates rise, earnings multiples will contract, and so it will be increasingly important to identify companies that can outrun – through their growth – the multiple contraction that we expect to see. Companies with pricing power should also be better positioned to weather an inflationary environment than companies that are unable to raise prices as costs are increasing.

A large portion of the U.S. growth investing landscape is made up of information technology and health care stocks. In fact, over half of both the Russell 1000® Growth and Russell Midcap® Growth indices are in these sectors (Exhibit 2), in contrast with the last significant period of inflation – the 1970s – when the economy was much more goods-driven and industrial-focused.

Select companies in these sectors have the ability to produce wide profit margins and operate with a lower level of labor intensity than other market segments. So, while inflation will certainly matter for these businesses' earnings, these characteristics could help to make its impact less pronounced.

Exhibit 2: U.S. growth index sector weightings



Source: FactSet, as of 31 January 2022.

Investment themes in a changing environment

One of the lessons we learned through the COVID crisis is that direct digital relationships with customers are extremely significant. Companies that have successfully forged these relationships have gained the ability to constantly communicate with their customers, but also to learn from them – for instance, to better manage inventory, working capital and other business functions. The omnichannel approach is readily evident in the retail industry but has also been adopted in office work environments, telemedicine, online dating and other areas. From an investment standpoint, these digital relationships have added flexibility and resiliency, strengthening businesses across the economy.

Going forward, we see opportunity in other long-term themes. For one, we believe that there is still a long runway of growth for the large cloud platform providers, even as these businesses have already grown at an impressive rate. Semiconductors are providing building blocks for rising cloud server demand, but also key components in the shift to electric – and, ultimately, autonomous – vehicles. As manufacturers ramp up

electric vehicle (EV) production, essential chips and components that weren't present in internal combustion vehicles, but are in EVs, will be in high demand.

In a similar vein is the growth of biopharmaceuticals such as protein-based therapeutics, gene therapy and, famously, mRNA vaccines. Along with the progress of these technologies, costs in pharmaceutical production will likely increase dramatically, and the companies selling the various components used in their production will have powerful demand over the next 10 to 15 years.

Maintain focus

During challenging times, it is important to question what is changing in the economy and with companies. Just as COVID has shaped markets in recent years, the military action in Ukraine has altered the global economic landscape and will have lasting impact. However, as markets shift, we continue to focus on companies well-placed for multi-year, secular growth in areas requiring a significant amount of investment. High-quality businesses that can capture a disproportionate share of those economics may be less exposed to external factors as more of their growth stems from capturing market share.

HOW DO ESG FACTORS IMPACT VALUATIONS WITHIN THE TECHNOLOGY SECTOR?



Alison Porter

A study by the Global Technology Leaders Team explores the relationship between environmental, social and governance (ESG) factors and the valuations of technology companies. Portfolio Manager Alison Porter shares the key findings.

Key takeaways

- » The Global Technology Leaders Team's study analysed the full investable universe of technology companies using an ESG scoring system and key valuation metrics. The question was whether those with robust ESG ratings on average received a valuation premium.
- » The analysis found a clear positive relationship within the sector between companies ranking well for ESG and higher stock valuations.
- » The study also challenges the popular misconception that ESG ratings are less relevant for high-growth stocks with high valuations. In fact, it showed that the relationship was even stronger here.

A multitude of studies have sought to prove that environmental, social and governance (ESG) factors have a significant impact upon stock price returns, but few have focused on valuation. Results have been particularly mixed for some of the strongest-performing regions, notably the US. Previous studies have shown less convincing correlations of stock returns with ESG considerations because of the lack of granularity in comparing similar companies. Given the strong outperformance of the technology (tech) sector versus the broader equity market in the last two decades¹, the US market, which is more heavily weighted to tech, has often exhibited a weaker relationship between ESG factors and stock valuation.

The technology sector has been the largest source of economic value creation and disruption in stock markets over the last decade. An important question for us as technology investors, and for many of the clients we speak to, is 'what is the relationship between ESG factors and valuation within the sector'? We therefore undertook a

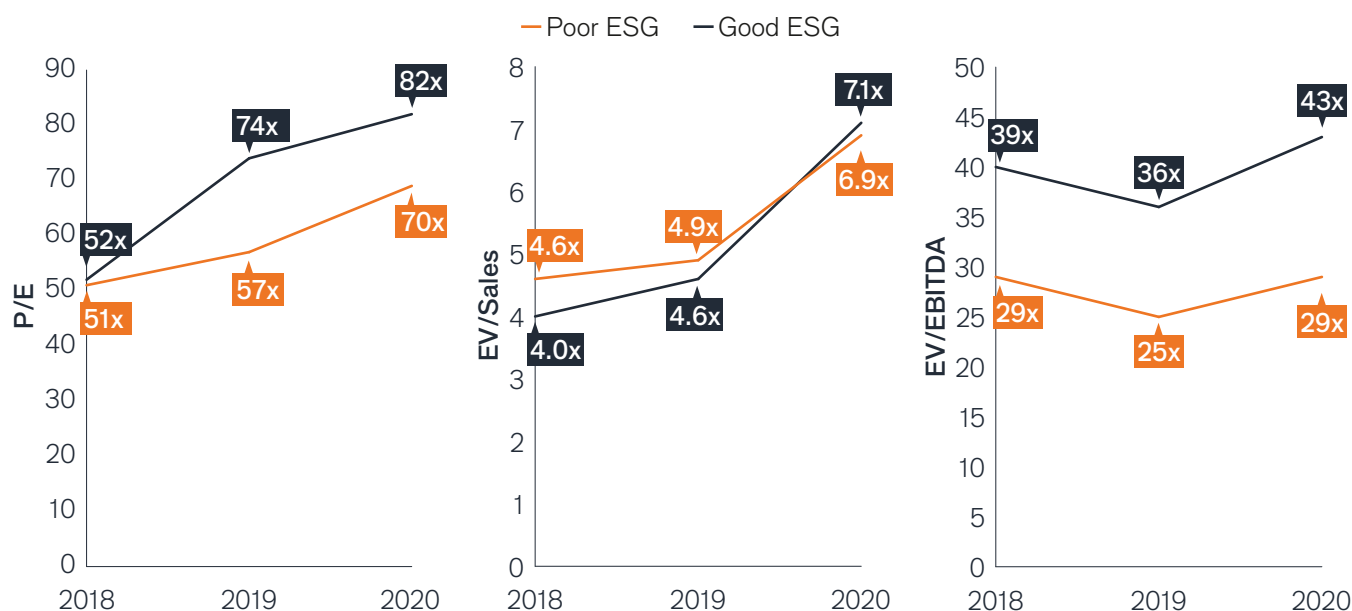
study to explore the extent to which technology companies with robust ESG ratings receive a valuation premium. It was important to isolate factors that affect stock price performance and valuation in order to remove the impact of technology disruption itself to examine the influence of ESG factors at a more granular level.

Scope of the study

We used two approaches to answer the question, with data covering 2018 through 2020. The first approach was to rank the entire universe (MSCI ACWI Information Technology + Communication Services Index) of circa 700 tech stocks using our ESG scoring system². We then divided the companies at the midpoint into "good" and "bad" ESG scorers and compared these against common valuation measures. Figure 1 shows the outcome with a clear relationship between good ESG scores and higher valuations.

“The technology sector has been the source of economic value creation and disruption in stock markets over the last decade. An important question for us as technology investors, and for many of the clients we speak to, is 'what is the relationship between ESG factors and valuation within the sector'? ”

Figure 1: Entire universe approach



Source: Bloomberg, Janus Henderson Investors, as at 31 December 2020. Entire/investable universe = MSCI ACWI Information Technology + Communication Services Index.

The second approach was designed to control for other valuation factors and to compare companies like-for-like. We therefore split the universe into 20 buckets based on company size, growth and quality. We then ranked each bucket using our proprietary ESG scoring system, and again the bucket was split in half and compared against valuations. This again showed a positive relationship in the majority of buckets (indicated in green in Figure 2) between ESG factors and valuation.

Key findings

There was of course significantly more detail behind the approach and findings, but to summarise the conclusions of the study, we found:

- Technology companies with strong ESG standards have their financial performance valued more highly by the market on average.
- 60%** of multiples across companies with similar characteristics that were bucketed into showed a valuation premium given by the market for the higher-scoring ESG companies

- 54%** of multiples showed a valuation premium when assessed against P/E ratios and enterprise value versus sales metrics
- 72%** of multiples showed a valuation premium when assessed against enterprise value versus EBITDA
- ESG scores can be influenced by the level of corporate ESG data disclosure, which, in turn, can often be driven by companies' market capitalisation.
- Technology companies with weak ESG standards can be value traps. Even companies with strong earnings growth are unlikely to receive full credit compared to peers who demonstrate positive regard to non-financial factors.

Regional perspective (and a surprise)

A clear trend is seen from 2018 to 2020 as premiums widened, and all continents saw a premium given in 2020. In Asia, in 2020 the higher-scoring ESG companies received on average a premium of +36% versus the lower scoring companies.

Figure 2: Bucketing approach

Market Capitalization	Growth	Quality	Bucket	P/E			EV/Sales			EV/EBITDA			% Yes
				2018	2019	2020	2018	2019	2020	2018	2019	2020	
Micro	Low	Low	1	Yes	No	No	No	No	No	No	No	Yes	22%
Micro	Low	High	2	No	No	No	No	Yes	Yes	No	No	No	22%
Micro	High	High	3	No	Yes	Yes	No	No	No	No	Yes	No	33%
Micro	High	Low	4	Yes	No	No	No	No	No	Yes	Yes	Yes	44%
Small	Low	Low	5	No	Yes	Yes	No	No	No	Yes	Yes	Yes	56%
Small	Low	High	6	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	89%
Small	High	High	7	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	89%
Small	High	Low	8	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	89%
Medium	Low	Low	9	No	Yes	Yes	No	No	No	Yes	Yes	No	44%
Medium	Low	High	10	No	No	No	No	No	No	Yes	No	No	11%
Medium	High	High	11	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	78%
Medium	High	Low	12	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	89%
Large	Low	Low	13	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	89%
Large	Low	High	14	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100%
Large	High	High	15	No	Yes	Yes	No	No	No	Yes	No	Yes	44%
Large	High	Low	16	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	67%
Mega	Low	Low	17	-	-	-	-	-	-	-	-	-	-
Mega	Low	High	18	No	No	No	Yes	Yes	Yes	No	No	No	33%
Mega	High	High	19	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	78%
Mega	High	Low	20	-	-	-	-	-	-	-	-	-	-

Source: Bloomberg, Janus Henderson Investors. Study period covers the years 2018-2020, data correct as at 31 December 2020. Market capitalisation classifications: Micro cap (\$0-2.49bn); Small cap (\$2.5-4.99bn); Medium cap (\$5-24.9bn); Large cap (\$25-249.9bn) and Mega cap (\$250+bn). High/low growth and quality: each company was compared to the median value of the group. If this was higher than the median it was classified as 'high' and if not, it was classified as 'low'. The same process was applied for growth and quality.

“A popular misconception is that for high growth stocks on high multiples, ESG ratings would be less relevant. The study actually found that for high growth companies, the relationship is even stronger.”

Both Europe and North America, and indeed South America, saw sustained increases across the three years of data in the premiums given to higher-scoring ESG companies with respect to the P/E ratio.

The analysis also showed that the premium awarded for higher ESG ratings is not necessarily dependent on growth. A popular misconception is that for high-growth stocks on high multiples, ESG ratings would be less relevant. The study actually found that for high-growth companies, the relationship is even stronger.

Investment implications

The study shows empirically that companies that perform well on ESG metrics, and which can show significant improvement in these factors, have tended to be valued more highly by investors in the markets and, crucially, that

ESG factors should be an integrated part of the investment process. In our view, effective active engagement to improve ESG aspects of performance can have a positive impact on capital returns. We believe that owning companies that are laggards on ESG metrics is appropriate only with a measured action plan for engagement.

It is of course important to remember that investors' focus on ESG factors has only really intensified in the last ten years or so, and there should be an awareness of important nuances or gaps in the data. This is particularly the case when assessing the ESG credentials of smaller companies. But we believe the results of the study add to the body of literature supporting the integration of ESG considerations into investment thinking and could ensure capital is allocated more effectively for ESG-conscious investors.

For further information on this study please contact your local Janus Henderson representative.

¹ Source: Refinitiv Datastream, MSCI AC World Information Technology Index vs MSCI World Index, 31 December 2001 to 31 December 2021. Past performance does not predict future returns.

² The Global Technology Leaders Team's proprietary ESG scoring system incorporates 25 raw data metrics considering E, S & G fairly and dynamically based on data quality and relevance. To avoid subjective interpretations, underlying raw data metrics were used where possible. A rating is applied and scaled based on data quality, data relevance to technology and finally ESG focus & relevance. Each company is thus assigned an individual ESG score.

Glossary

P/E (Price-to-Earnings ratio): A company valuation metric that measures a company's current share price relative to its earnings per share (EPS).

EV/Sales (Enterprise Value-to-Sales multiple): Capitalize a quantifiable metric of a company's valuation based on its annual sales taking into account the company's equity and debt.

EV/EBITDA: Enterprise Value/Earnings Before Interest, Taxes, Depreciation & Amortisation (EV multiple). The enterprise multiple is a company valuation metric taking into account a company's debt and cash levels in addition to its stock price, and relates that value to the firm's cash profitability.

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.

Growth stocks: companies that have strong growth potential, whose earnings are expected to grow at an above-average rate compared to the rest of the market.

Market capitalisation: total market value of a company's issued shares, calculated by multiplying the number of shares in issue by the current price of the shares and used to determine a company's size.

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.



AN INVESTOR'S CHINA CONUNDRUM



Daniel Graña

When seeking opportunities in China, equity investors must understand the importance of the alignment between corporate and central government priorities, Emerging Market Equity Portfolio Manager Daniel Graña explains.

Key takeaways

- » China's central government has established a new set of national priorities with the aim of increasing economic self-reliance and sophistication while also furthering the objective of "common prosperity."
- » Corporate strategies are expected to be aligned with these priorities, and failure to do so increases the risk of regulatory scrutiny.
- » When selecting securities in China's equities market, investors should rely upon both fundamental company analysis and – increasingly – a "political governance" lens.

The phrase *"the only constant is change"* may not have been coined by investors, but it's an idea they should take to heart given the dynamism of both the global economy and financial markets. It applies to individual asset classes as well, and one notable development is how much emerging market (EM) equities have evolved in the years since China became a major actor in the world economy and destination for investment capital. The obvious benefit of China's ascendancy has been the steady stream of attractive investment returns. In the 20 years ended December 31, 2021, the country's economy, as measured by gross domestic product (GDP), grew at an annual rate of 8.7% and its equity market generated annual returns of 11.2% in U.S. dollar terms, based on the MSCI China Index. The downside is that Chinese stocks now account for roughly 32% of the MSCI Emerging Markets® Index, which not only gives it tremendous sway over the entire asset class, but also – given the country's particular economic and political structure – poses a host of considerations that merit investors' attention.

These questions have grown in importance in recent years as the central government has taken a more assertive stance in managing the country's economic affairs and its sometimes freewheeling private sector. While demographic shifts likely mean the period of China's most rapid growth is in the past, the potential for attractive returns remains.

Accessing them, however, has grown more complicated. Unlike in developed markets, equity investors cannot focus on company-specific drivers to the exclusion of system-wide factors. The "macro," in our view, has always mattered in emerging markets, but with the ever-larger role played by political governance in influencing China's economic and market outcomes, investors must be cognizant the playbook that worked for emerging market equities over the past few decades no longer applies for the Asian giant.

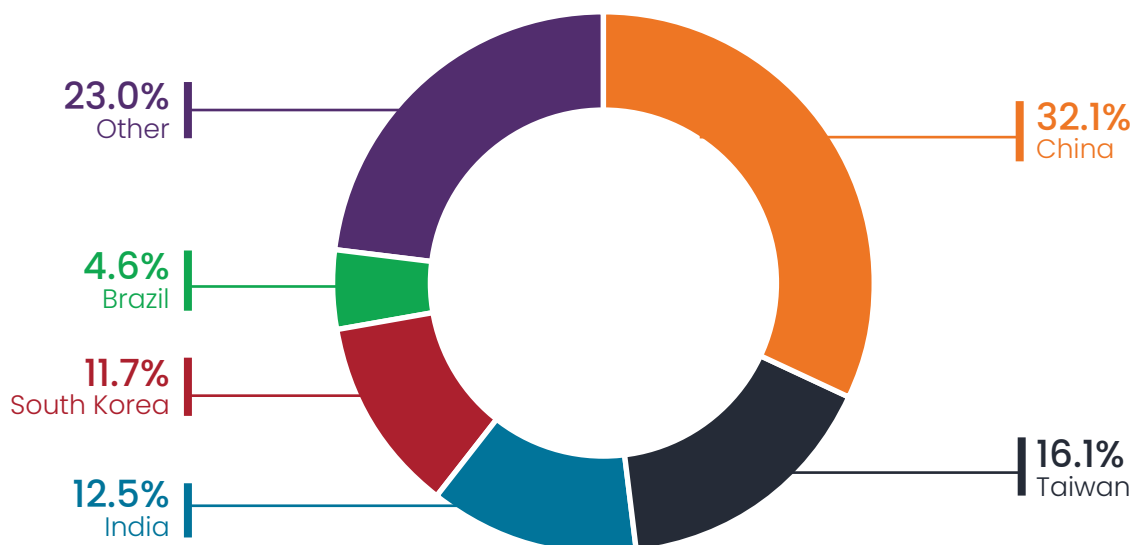
A new chapter for the playbook

Since their progression into a formidable asset class, EM equities have generated returns for investors on the back of two durable secular themes:

- The outsourcing of the world's manufacturing capacity to EM countries by multinational corporations attempting to harness the efficiencies of globalization. In this sense, EM equities acted as a "call option" on global GDP growth.
- The convergence of income and living standards between EMs and developed markets as the former's workforces gained productivity-enhancing skills that enabled their home countries to move up the value chain and increase national wealth.

Exhibit 1: MSCI emerging markets index composition by country

China constitutes nearly a third of the emerging market equities benchmark, and its share would climb toward 50% should Mainland (A) shares be fully included.



Source: MSCI, as of 31 January 2022.

Implicit in each of these was EM countries largely emulating more advanced economies by privatizing industries, increasing cross-border trade and creating the regulatory and legal framework that allow a private sector to thrive. While these themes still have room to run in many instances, the rise of China's economic might has enabled the country to define its own rules of the road on the path toward upper-income status. These rules – from how laws governing the private sector are created to how they are applied – are alien not only to developed market investors, but also to many who have ridden the sometimes volatile, but relatively templated, wave of EM growth over the past two-plus decades.

That China plays by its own set of rules was brought home by a series of developments over the past 18 months. The high-profile initial public offering of ANT Financial was canceled at the eleventh hour; ride-sharing company Didi had to delist from the New York Stock Exchange under the auspices of data security; and the education industry saw billions of dollars in market capitalization erased, also on grounds putatively related to security, and the increasingly publicized maxim of “common prosperity.”

Is China still investable?

The degree to which the playing field has changed – and the incremental level of risk it entails – bodes the question: Is China still investable? The answer is yes, but it comes with a notable caveat. Analyzing the competitive position and earnings potential of individual companies is not enough. Perhaps more than in any other country, understanding increasingly assertive political governance is equally necessary in assessing the risk profile of a particular company or industry.

Unlike Western systems of government where *rule of law* is the guiding principle, China is guided by *rule of party*. There is no open deliberative process, no independent institutions applying checks and balances nor elections providing feedback from citizens. And while the private sector has been given relatively free rein during the years of economic liberalization, the party has now let it be known that the economy is just a tool in meeting certain state objectives rather than a system in and of itself.

Resetting national priorities

The no-holds-barred industrialization and urbanization that China rode toward becoming a middle-income country are behind it. The central government has defined a new set of national priorities that it expects to propel the next stage of economic development while also addressing acute social, economic and even geopolitical exigencies. In recent

years, these objectives have become prominently featured in officials' speeches, party directives and regulatory rulings. While the central government still maintains other priorities, the three that we expect to have the greatest influence on policy over the mid-term are:

- **Innovation:** China has long sought to move up the value-added chain. The growth of more advanced processes and products would not only boost productivity and incomes, but also provide a domestic alternative to many technologies and goods that presently can only be sourced abroad. The U.S.-China trade war exposed these vulnerabilities, and by prioritizing domestic innovation, the country would move toward its “dual circulation” objective where it still participates in the global economy in some areas but also becomes self-sustaining in other key industries.
- **Decarbonization:** While China likely shares the concerns of other countries about the environmental impact of continued reliance on hydrocarbons for energy needs, it has the added incentive to secure its energy resources. A yawning gap exists between China's demand for oil and domestic supplies. In the eyes of Beijing, this represents a strategic vulnerability that must be remedied. Furthermore, the country already enjoys a commanding position in the renewable energy supply chain. Continued emphasis on renewables not only achieves the objective of energy independence, but also can further cement China's global leadership in a high-value, growth area of the global economy.
- **Common Prosperity:** In harkening back to its roots, the Communist Party of China has recently taken steps to rein in what it sees as the excesses of capitalism at the expense of the greater good. Specifically, the party wants to mitigate highly bifurcated economic outcomes for its citizens before inequality becomes entrenched. While the government continues to recognize the valuable role played by the private sector, it doubts that market outcomes alone can achieve common prosperity. Fueling profit margins by exploiting gig workers no longer cuts it. And by gaining regulatory control over emerging strategic industries, such as fintech, it can ensure that the ethos of common prosperity is embedded in these business models.

None of these priorities are anathema to a healthy private sector or Chinese equities continuing to be an attractive destination for global investors. They do, however, lay out the rules of the road to which investors should adhere. Due diligence of Chinese companies can no longer stop at analyzing end markets, management teams and profitability; it must also include whether business models

adhere to state priorities. Companies that are aligned with government objectives can likely continue to deliver value to shareholders as long as they stay within these defined parameters. In contrast, those that haven't gotten the message are putting themselves at risk of being on the receiving end of the sometimes harsh regulatory scrutiny that authorities have wielded over the past several quarters.

"The" driver in emerging markets

With investors now having to navigate factors such as political governance that are typically beyond the purview of equities analysis, some may ask whether the risk of China exposure is worth it? Despite the shifting landscape, we believe the real risk is avoiding Chinese stocks. As illustrated in Exhibit 1, Chinese companies already comprise roughly one-third of the MSCI Emerging Markets Index, and that is with Mainland listings only partially included. Should these "A Shares" be fully included, China's representation in this benchmark would climb to approximately 50%.

This sizing is not arbitrary. China is the dominant emerging market and the second-largest economy in the world. Furthermore, many of the key themes that attract investors to the asset class are most pronounced in the country. A zero weight to the Asian giant would remove not just a

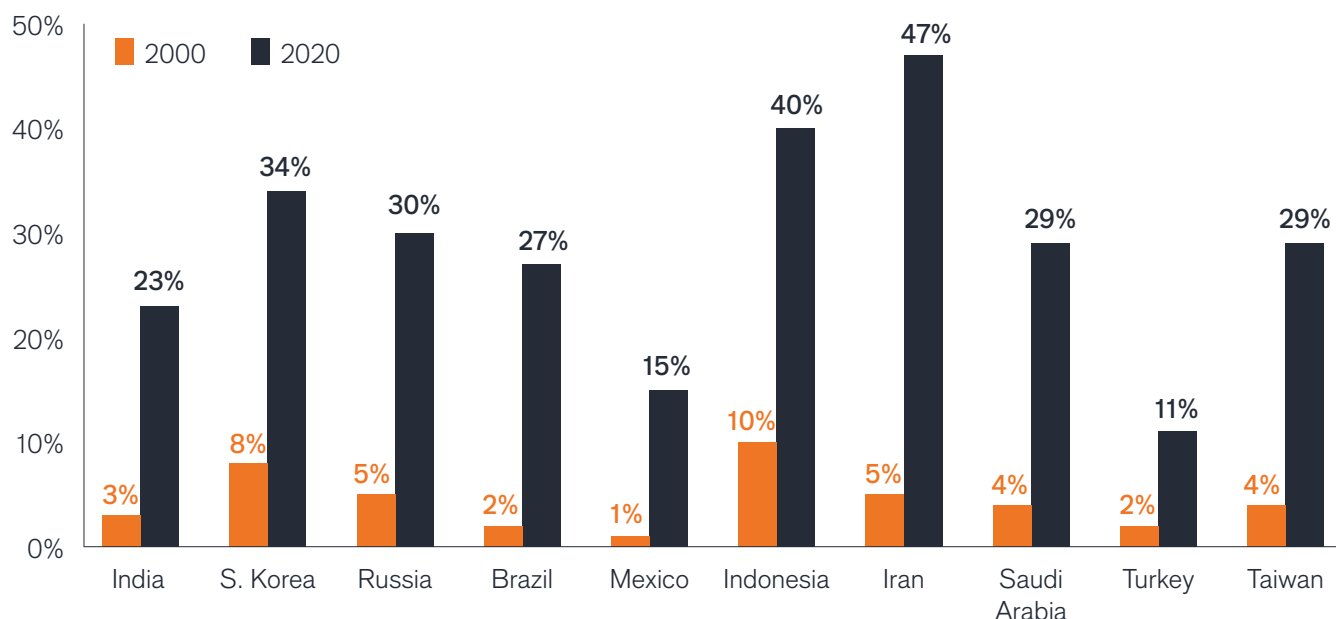
significant portion of the investable universe from consideration, but also limit access to powerful themes such as rising consumption, the digitization of the economy and innovation across a host of value-added industries.

Increasingly, the fate of other emerging countries is tied to China. As illustrated in Exhibit 2, the country is a major buyer of commodities from EM natural resource producers and of components destined for its immense manufacturing base.

As China's economy continues to transition toward consumption, a larger amount of these imports will remain in the country rather than continue onto developed markets in the form of finished products. Goods and services flow the other way as well, exemplified by Chinese gaming, social and fintech platforms expanding their footprint in other emerging markets.

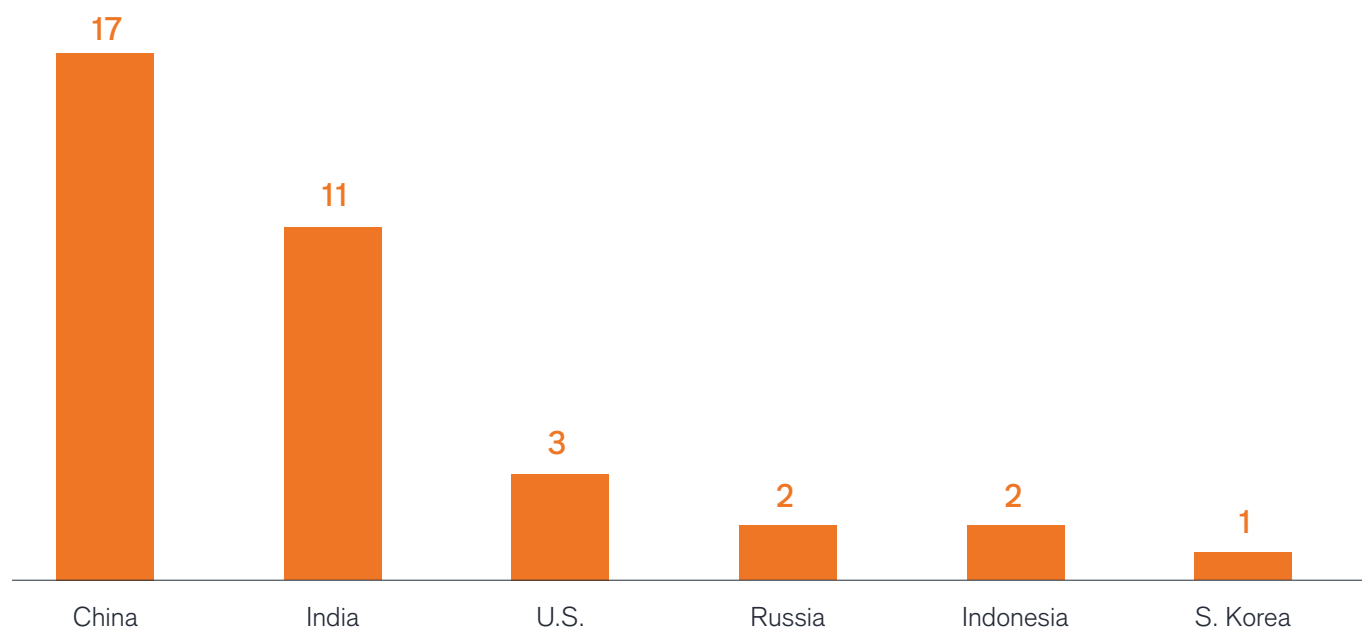
The pace at which EM companies are trading – and competing – with each other is rising. In order to properly assess the competitive landscape and identify the most promising investment opportunities, we believe one should take a holistic view of EM equities. With their fortunes so intertwined, we believe the notion that China equities should be viewed as a separate asset class from other EM equities sells short the magnitude of this relationship and, thus, would introduce inefficiencies into the investment process.

Exhibit 2: Emerging market exports as a percentage of all exports



Source: IMF, as of 2020.

Exhibit 3: University enrollment in STEM curricula (millions)



Source: Bloomberg.

Another development that should further raise China's relevance to EM investors is the establishment of a dual-circulation economy. This initiative seeks to increase China's level of economic self-sufficiency in strategic industries while also keeping the country enmeshed in the global trading system. The government's objective is to reduce its dependence on imports of key inputs, ranging from semiconductors to energy. The "internal" segment of the economy will help further strategic priorities and cater to rising domestic consumption. It will also likely be the domain of more complex, value-added processes that both the government and investors would favor. In contrast, while there are exceptions and additional efficiencies to be reaped, the "external" sector would likely rely upon lower-margin manufacturing processes.

An innovative future

Complementary to economic self-reliance and value-added industries is innovation. Historically, investors have sought exposure to novel technologies and processes via

developed markets. In recent years, EMs have become a source of innovation in their own right. Importantly, new technologies and business models are aimed at addressing unique business frictions within EMs. In finance, fintech companies are enabling large, unbanked populations to access the financial system, and blockchain applications have the potential to provide credit solutions for small businesses. Similar developments are occurring within health care and – in the case of e-commerce and food delivery – the consumer sector.

As shown in Exhibit 3, with its large population of STEM (science, technology, engineering and mathematics) students and Internet users, China is well positioned to enhance productivity within industries and compete globally across a range of sectors in coming years. Innovation has become a dominant secular theme across all geographies, and research-driven Chinese companies will likely need to be a central component of EM allocations seeking exposure to these disruptive forces.

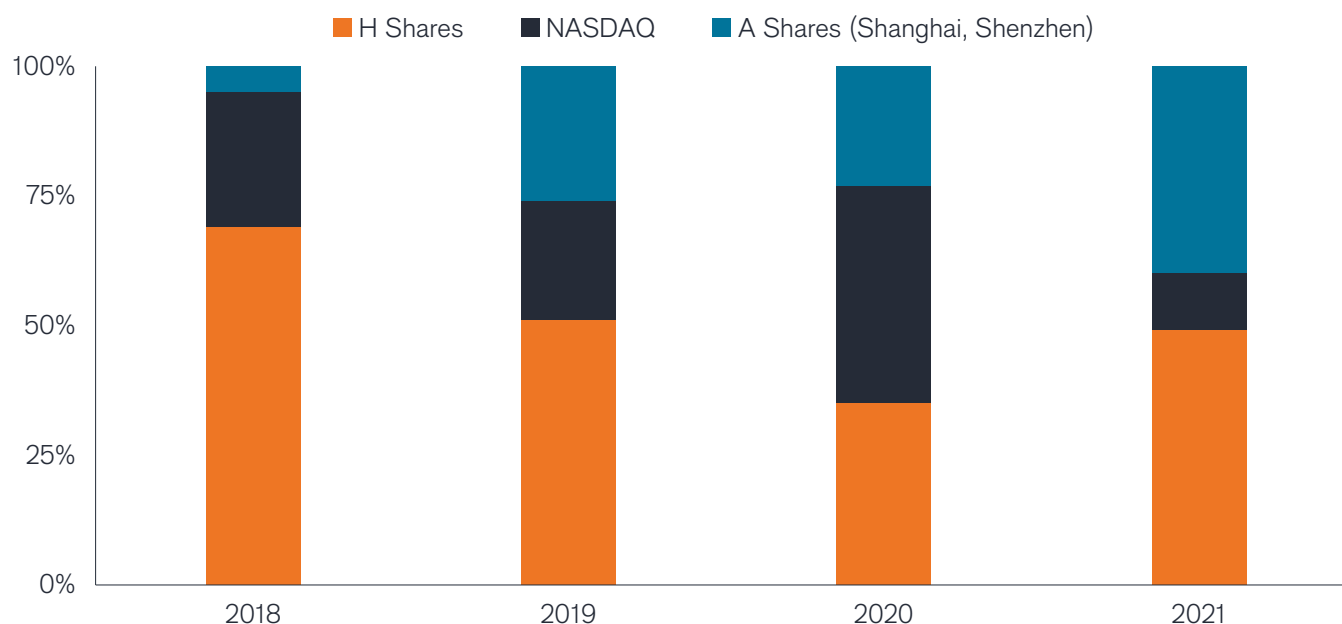
How investors access innovation in China is changing too. Many new offerings are likely to be steered toward Hong Kong's exchange for Mainland companies (H Shares) while established ones may feel the need to make Hong Kong their primary exchange. This process is already underway (as seen in Exhibit 4) as the share of Chinese companies listed in Hong Kong has risen at the expense of the NASDAQ.

While these developments may provide a boost to Hong Kong's equities exchange, companies listed on the Mainland (A Shares) should also benefit from the government's emphasis on common prosperity and innovation. Implicit in a domestic listing is more robust government oversight and lower concerns about the reach of foreign securities regulators. Mainland exchanges are also home to many innovative technology and biotech companies. This stands in contrast to Hong Kong, which hosts many state-owned enterprises in banking, communications and energy that were popular with an earlier era of China equities investing.

Balancing promising opportunities and unique risks

In summary, China cannot be ignored by investors. The size of the economy and progress of its innovative businesses are proof of that. But the rules have changed, and the central government – by delineating its strategic objectives – has laid out how companies are expected to function in this unique economic system. As new and disruptive businesses grow and become more sophisticated, the traditional skills of fundamental company analysis and security selection will be important tools in identifying the most promising opportunities. Yet, investors cannot rely exclusively on a company-centric lens. Governance and country-level, macro drivers will also play a role in effectively navigating this distinctive landscape. Political risks have undoubtedly risen, but we expect that both the private economy and international investor capital are welcome as long as these entities' objectives are aligned with those of the party. Not only does experience matter in determining the nexus between state and investor priorities, so does the recognition that China's multi-decade – and likely continuing – rise has created a more complex environment for EM investors to navigate.

Exhibit 4: China exposure within the MSCI emerging markets index



Source: FactSet, as of 31 December 2021.



CAN BIOTECH BOUNCE BACK?



Andy Acker

Despite experiencing its deepest and longest drawdown on record, the biotechnology sector looks stronger than ever, says Portfolio Manager Andy Acker, thanks to accelerating innovation and valuations that have reset.

Key takeaways

- » Over the past year, biotechnology has been caught up in a historic sell-off, sending the sector's stocks down by more than 50%, on average.
- » But in our view, biotech's long-term growth drivers have not been impaired. On the contrary, a combination of scientific breakthroughs and robust funding are expected to lift sales by an average of 9% annually through 2026.
- » At the same time, the S&P Biotech Sector trades at half its long-term average, which could set up the sector for a strong recovery.

While global equity markets have been in retreat since the beginning of 2022, for the biotechnology sector, the selling has been going on for much longer. Since hitting a peak on 8 February 2021, the SPDR® S&P® Biotech ETF (XBI), a widely used industry benchmark, has declined by more than 50% and underperformed the S&P 500® Index by over 60% – representing the XBI's longest contraction on record (270+ trading days), as well as its deepest on both an absolute and relative basis.¹

It's easy to be discouraged by this performance, but we don't believe the long-term outlook for biotech has become impaired. On the contrary, with valuations compressed and innovation in the sector accelerating, we'd argue the case for biotech has only grown stronger.

Short-term setbacks, long-term value

A number of reasons have been cited for biotech's recent rout. For one, it followed a frothy initial public offering (IPO) market, fueled by monetary stimulus and enthusiasm for the industry's historic COVID-19 response, lifting valuations of early-stage companies. It was impacted by a renewed push for drug-pricing reform in the U.S. and the absence of a permanent commissioner at the Food and Drug Administration (FDA), which may have contributed to unexpected regulatory decisions. Finally, the prospect of rising interest rates drove a rotation out of longer-duration assets, including biotech.

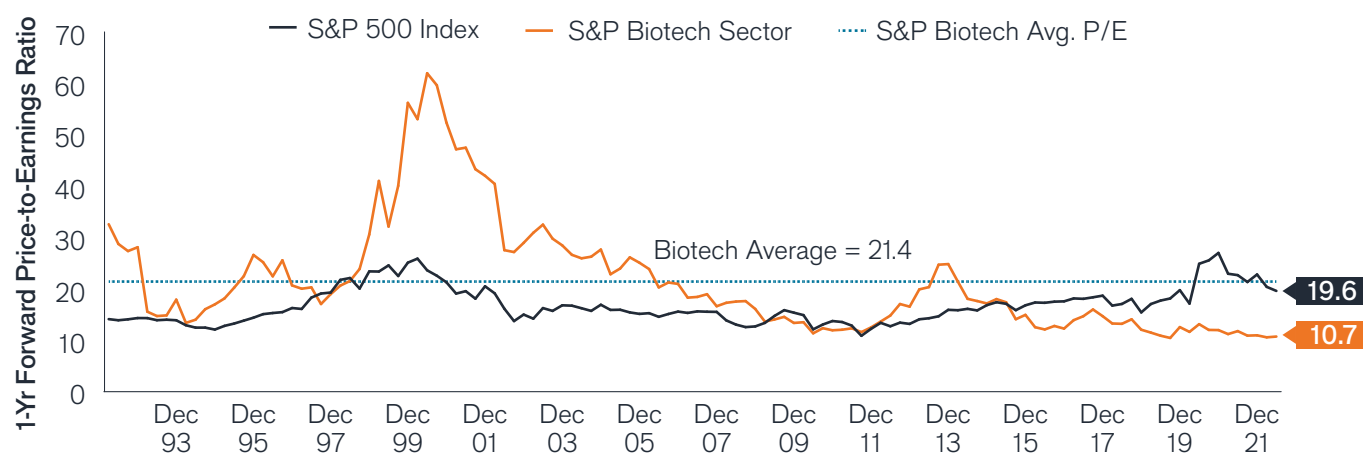
We believe many of the sector's headwinds are showing signs of abating. Proposals that would allow the U.S. government to "negotiate" drug prices have been scaled

back and, in their current form, would affect only a small subset of medicines near the end of exclusivity periods.² The passing of legislation could also remove an overhang of uncertainty for the sector. The FDA has kept up a rapid pace of approvals – 50 new drugs in 2021, on par with the elevated rate of recent years – even before a permanent commissioner was confirmed in early 2022.³ And studies show little correlation between biotech returns and interest rates. In fact, from 2000 to 2021, biotech stocks saw gains in six out of the nine years when 10-year U.S. Treasury yields rose.⁴

The IPO boom that occurred in biotech in 2020 and 2021 has stalled amid market volatility and a shift to tighter monetary policy. Some reckoning was likely due: Over the past two years, private companies were often completing IPOs just months after the last private transaction, compared with a more typical one-year time frame, all while fetching premiums of 50% to 100% or more. Further, a growing percentage of firms were going public in the early stages of their pipeline development, raising risks in development and the timeline to profitability for investors.⁵

The IPO freeze could thaw when market volatility subsides and the path of rate hikes becomes clearer. In the meantime, there's reason to believe many areas of the sector have become oversold. As of early 2022, a remarkable 16% of U.S.-listed biotechs traded below the level of cash on their balance sheets, more than during the 2002 and 2008 equity bear markets (8% and 11%, respectively).⁶ And by the end of February, valuations for large-cap biotechs sat well under their long-term average, as well as the average for the broader equity market (Exhibit 1).

Exhibit 1: Biotech valuations fall



Source: Bloomberg, from 30 September 1992 to 28 February 2022. The S&P Biotech Sector is composed of the large-cap biotechs in the S&P 500 Index. **Forward Price-to-Earnings (P/E) Ratio** measures share price compared to estimated future earnings per share for a stock or stocks in a portfolio.

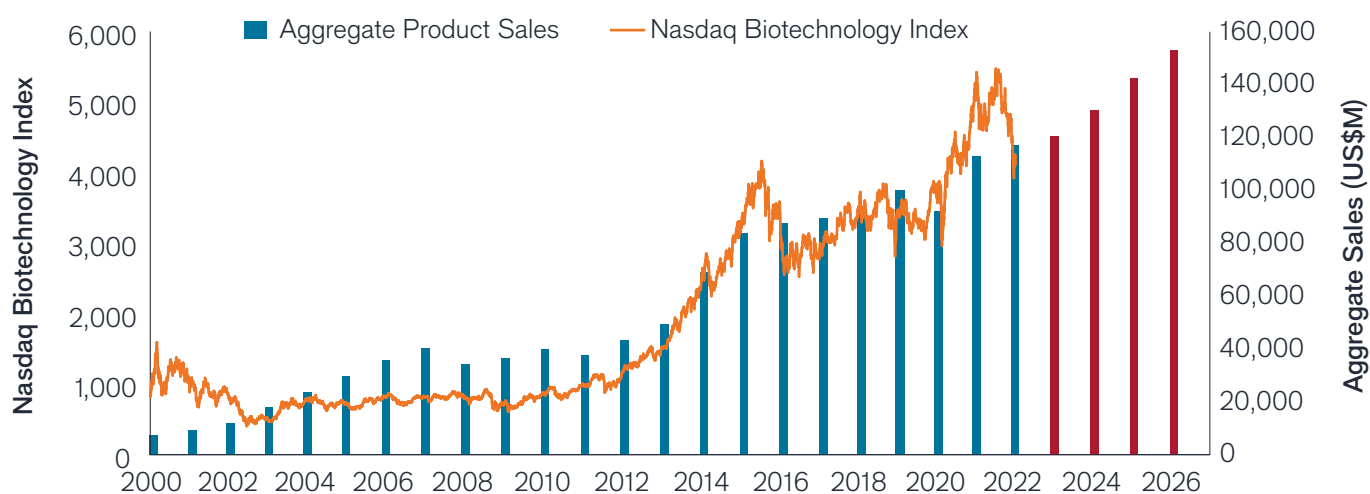
Innovation drives growth

Even as biotech stocks have sold off, the sector's innovation has continued to advance. Last year, more than half of drugs approved by the FDA were considered first-in-class, meaning the medicines had mechanisms of action different from those of existing therapies. Nearly three-quarters (74%) used one or more expedited development and review methods, available for drugs that have the potential to significantly advance the standard of medical care.⁷

Importantly, the drug pipeline is expanding. Globally, more than 6,000 medicines are actively under development, up 68% from 2016, according to the IQVIA Institute.⁸ Funding has been ample: In 2020, biotech and pharma saw US\$27

billion in venture capital deal activity, followed by US\$38 billion in 2021.⁹ For its part, large-cap biopharma spent a record US\$133 billion on research and development last year, up 44% from 2016.¹⁰ Still, small- and mid-cap biotechs are responsible for the majority of molecules in the pipeline today, while large-cap companies face a looming patent cliff for many top-selling drugs. Consequently, it's likely that over the coming years these industry giants, sitting on large cash reserves, will seek to replenish product portfolios through mergers and acquisitions (M&A) or strategic partnerships. Indeed, in 2022, a cohort of 18 pharma companies are estimated to have roughly US\$1.7 trillion of total funding available for deal-making, including more than US\$500 billion in cash.¹¹

Exhibit 2: Nasdaq biotechnology index vs. aggregate product revenue, 2000-2026E



Source: Cowen and Company, as of 25 February 2022. Data from 31 December 1999 through 31 December 2026.

Note: Revenue is an aggregate of actual and estimated figures for 65 companies representative of the biotech sector. The **Nasdaq Biotechnology Index** is a stock market index made up of securities of Nasdaq-listed companies classified according to the Industry Classification Benchmark as either the biotechnology or the pharmaceutical industry. Red bars = estimated.

Positioning for recovery

It's anyone's guess what will spark a rebound in biotech, whether it's a pickup in M&A or clarity on drug-pricing reform or something else. But we do know that after the bottom of the last 11 drawdowns of at least 20%, the XBI has delivered a median return of 50% over the following 12 months.¹² In addition, over the long term, returns for large-cap biotechs have historically been correlated with drug revenues. With health care demand growing and pharma pricing remaining steady – particularly as more medicines revolutionize the standard of care – revenues are projected to rise by a compound annual growth rate of 9% from 2020 to 2026 (Exhibit 2).

As we navigate this challenging period for biotech, we recognize that some companies may have an easier time coming through the current market environment than others. Firms with meaningful revenues/earnings, lower multiples and/or near-term pipeline catalysts could be better positioned than earlier-stage, less-liquid companies. Strong balance sheets can also help support valuations. Still, over the long term, we remain as positive as ever about the sector's growth potential and believe the current drawdown – like the many that have come before it – will one day give way to a recovery.

¹ Bloomberg, Janus Henderson Investors. Current drawdown data from 8 February 2021 to 14 March 2022. Data for other periods are from 27 February 2006 to 16 March 2020 and reflect declines of 20% or more in the SPDR S&P Biotech ETF (XBI). XBI is designed to correspond to the performance of a modified equal weighting of the S&P Biotechnology Select Industry™ Index, with an inception date of 31 January 2006.

² Kaiser Family Foundation, *Simulating the Impact of the Drug Price Negotiation Proposal in the Build Back Better Act*, 27 January 2022.

³ Food and Drug Administration, as of 31 December 2021.

⁴ Cowen and Company, *This Biotech Bear Market Too Shall Pass*, 25 February 2022.

⁵ Janus Henderson Investors, as of 31 December 2021.

⁶ BioCentury, *Weathering one of biotech's worst bear markets*, 4 February 2022.

⁷ Food and Drug Administration, *Advancing Health Through Innovation: New Drug Therapy Approvals 2021*, January 2022.

⁸ IQVIA, *Global Trends in R&D: Overview through 2021*, February 2022.

⁹ Q4 2021 PitchBook-NVCA Venture Monitor, as of 31 December 2021.

¹⁰ IQVIA, *Global Trends in R&D: Overview through 2021*, February 2022. Data based on 15 largest pharmaceutical companies.

¹¹ SVB Leerink, *Big Biopharma Will Have \$500Bn in Gross Cash to Deploy YE22 - Get Set for M&A*, December 2021.

¹² Bloomberg, Janus Henderson Investors. Data from 27 February 2006 to 16 March 2020 and reflect periods where the SPDR S&P Biotech ETF (XBI) experienced a price decline of 20% or more.

Glossary

Monetary policy is a set of actions available to a nation's central bank to achieve sustainable economic growth by adjusting the money supply.

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