T. Rowe Price
INVEST WITH CONFIDENCE

PANORAMA

QUARTERLY THOUGHT LEADERSHIP PUBLICATION FOR OUR CLIENTS

FOURTH QUARTER, 2022

WELCOME......

.........to the fourth quarter 2022 edition of Panorama, T. Rowe Price's investment magazine for Asian investors.

Investors in 2022 have been challenged by a world that is moving from a regime of benign disinflation to one of higher-trend inflation, from an environment of low interest rates to a rising rate environment, and from a low volatility regime to a period in which volatility may stay elevated. The days of elevated equity valuations fueled by central bank largesse are clearly over. From a period of maximum liquidity provision during the pandemic we are entering a period of liquidity withdrawal as central banks focus on fighting inflation.

We are moving from an era of elevated valuations in both equities and bonds to one where valuations gravitate closer to their historical norms. In the new era, investors will need to be more valuation sensitive than before. More sophisticated and holistic investment frameworks may be required that take account of wider macroeconomic, social and geopolitical factors alongside traditional company fundamentals. At T. Rowe Price, we believe investors who are active and adapt to the new paradigm stand a better chance of emerging in good shape from this difficult period.

In our lead article, Richard Coghlan and Chris Faulkner MacDonagh, portfolio managers in T. Rowe Price's Global Multi-Asset Team, update their views on inflation. In April 2021 they correctly foresaw that unexpected inflation was a rising risk. Their view today is that inflation uncertainty is set to continue, with the 'embers of inflation' remaining hot throughout this business cycle.

Chris Kushlis, head of China and Emerging Markets macro strategy, believes there will be relative winners and losers from increased China-U.S. strategic competition. Sectors within China that could benefit include policy-supportive sectors, such as retail and consumer, new energy vehicles, and green energy. These domestic-focused sectors should be better insulated from sanctions-related tail risks.

Next, Rahul Ghosh, a Portfolio Specialist for Global Equity Strategies based in Singapore, gives us his thoughts on 'Time in The Market' versus 'Timing The Market' and the merits of staying invested in volatile times.

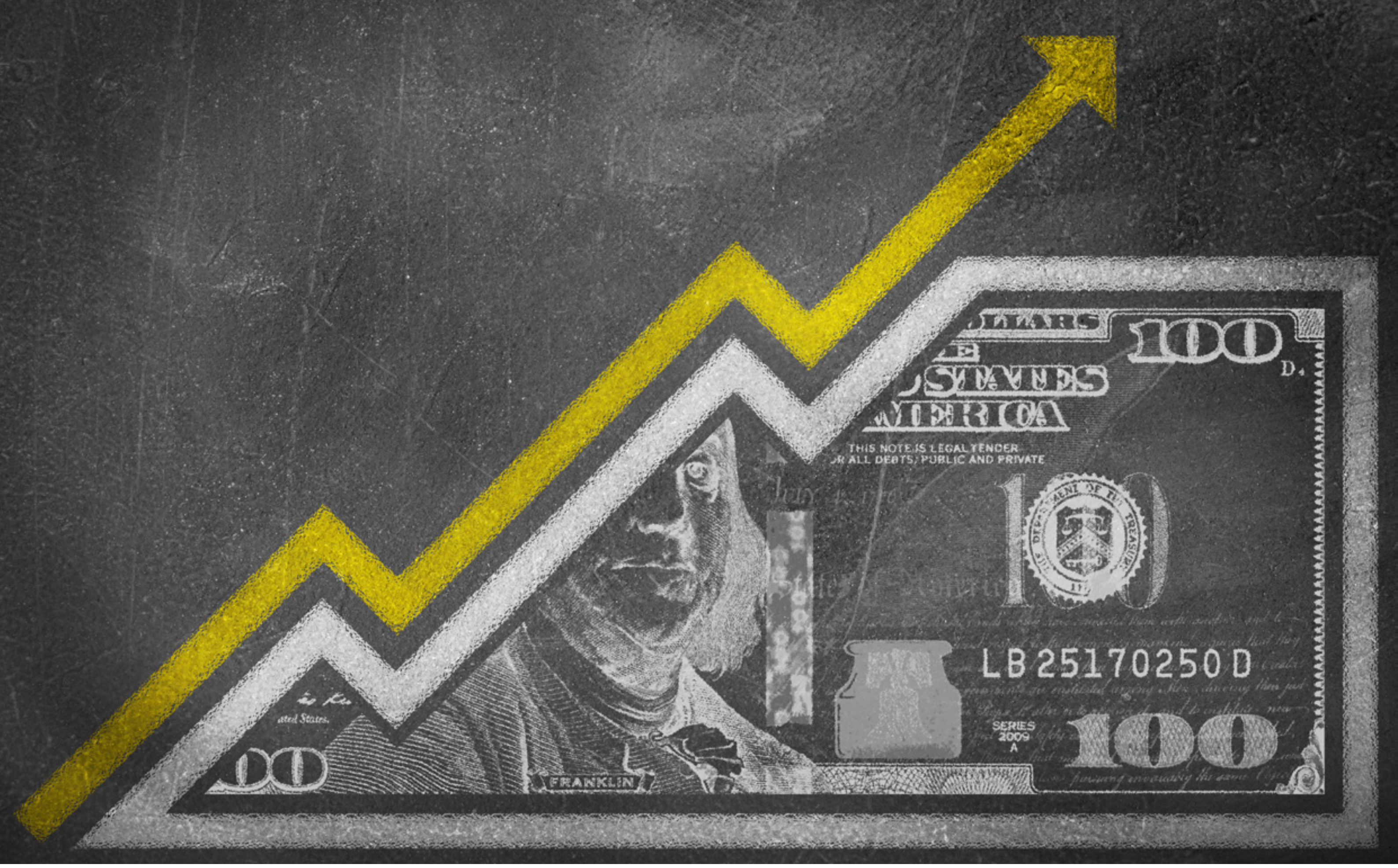
Turning to U.S. equities, Taymour Tamaddon, who manages T. Rowe Price's U.S. Large Cap Strategy, asks whether the boom in digital advertising has peaked. Longer term, he expects the market to remain robust as more advertisers turn to digital for the benefits it offers, such as greater targeting and measurability.

Ernest Yeung - manager of the Emerging Markets (EM) Discovery Equity Strategy – explains how "Value" could benefit from a new investment cycle, identifying four factors that are set to drive a boom in capital expenditure. Many of the companies likely to benefit from a new EM capex cycle lie within value-oriented areas of the market.

Finally, in our Personal Profile interview we spoke with Wenting Shen, a solutions strategist and portfolio manager with the Global Multi-Asset Division of T. Rowe Price. Wenting is responsible for engaging with clients and prospects in the Asia-Pacific region to identify how T. Rowe Price can best meet their investment needs and objectives through the firm's broad equity, fixed income, and asset allocation investment capabilities.

As always, we welcome your comments and feedback on this issue of Panorama investment magazine. Our contact details can be found on page 27.

T. Rowe Price Australia



INFLATION UNCERTAINTY IS LIKELY TO CONTINUE

Inflation embers to remain hot through this cycle

- Recent data confirms headline inflation has topped out, especially as commodity prices have rolled over. Underlying core inflation pressures remain, however.
- The coordinated sell-off across all assets in 2022 reflects the market's continued uncertainty about the implications of stubbornly high core inflation.
- Asset markets are grappling with the prospect of interest rates that are likely to be higher for longer, implying tighter liquidity and lower valuations.

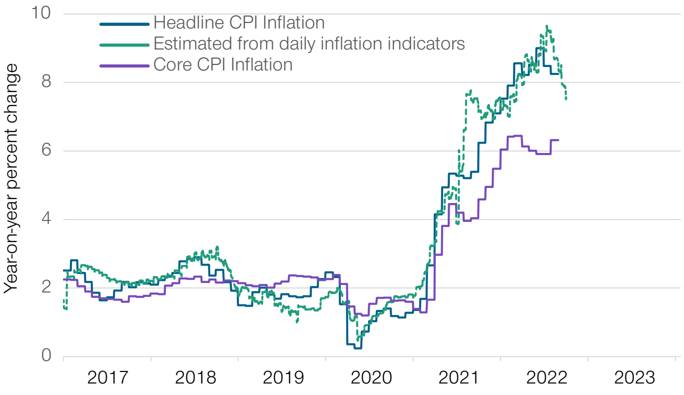

Richard Coghlan
Portfolio Manager,
Global Multi-Asset Team


Chris Faulkner MacDonagh
Portfolio Manager,
Global Multi-Asset Team

In March 2021 we took a non-consensus view of inflation, arguing that aggressive stimulus, rapid labor market tightening and past underinvestment in commodities meant that going forward, inflation was likely to accelerate. We firmly rejected the view—widely held at the time—that the emerging inflation in 2021 would prove transitory, the result of temporary COVID-related supply chain disruption. In this note, we provide an update to our inflation views in which we argue that underlying inflation pressures remain and are likely to feature throughout the current business cycle.

FIGURE 1: Headline Inflation Peaked, But Core Ticked Back Up

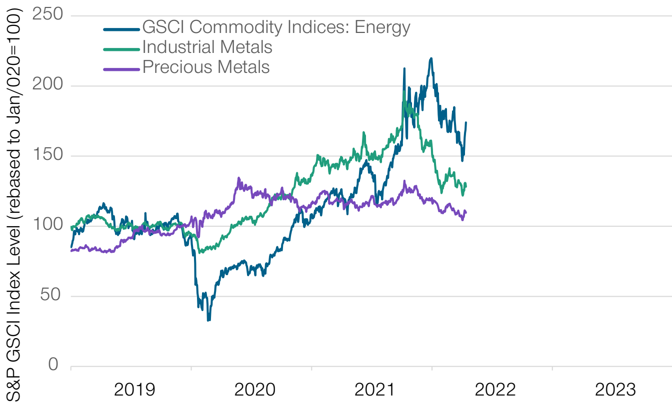
U.S. CPI inflation Year-on-Year %



Source: Bureau of Labor Statistics, Haver Analytics, Deep Macro LLC, T. Rowe Price calculations.
As of 4 October 2022.

FIGURE 2: Reflecting A Rollover in Energy and Metals Prices

Commodity prices (Jan 2020 = 100)



Sources: Standard & Poor's, Haver Analytics.
As of 7 October 2022.

Near-Term Inflation Outlook

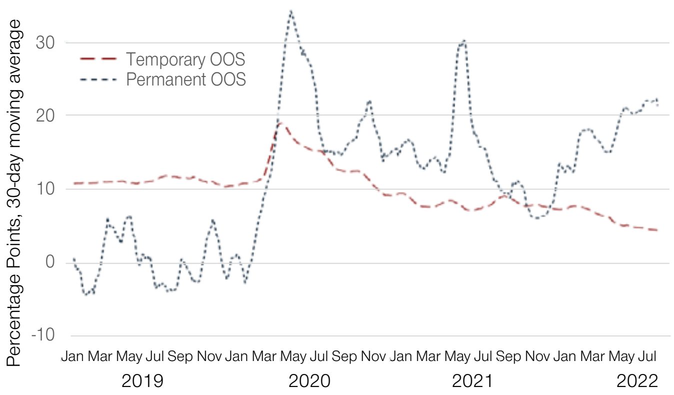
The peak in headline inflation has arrived, but core inflation continues to rise and spread (Figure 1). Recent data suggest that headline inflation has topped out, especially as commodity prices have rolled over. Higher frequency indicators confirm that this trend continued in September. Underlying core inflation pressures remain, however. Recent evidence seems to suggest that for the United States, as headline inflation has cooled with the recent drop in the oil price, non-energy demand picked up thanks to the boost to real incomes from cheaper gasoline prices. In particular, as gasoline prices trend down from their summer peak, this has acted as a “tax cut” for households, and they seem to be using these savings to maintain and boost consumption. This dynamic risks spreading inflation pressures from the initial boost to food and energy to core prices.

The coordinated sell-off across all assets in the first half of this year in our view largely reflects the market’s uncertainty about the implications of stubbornly high core inflation. Central banks seem set to continue to tighten financial conditions and drain the COVID-related emergency liquidity until inflation returns close to target (around 2% for most developed markets). This ongoing monetary tightening program has caused bonds to sell off at the same time as risk assets, leaving investors with nowhere to hide. Either this process continues until a recession happens, or the economy trundles through to a mid-cycle slowdown. In either case, concerns about the nexus between tighter liquidity and higher inflation is causing financial assets to discount significantly higher risk premia.

Near-term price relief is coming from parts of the goods sector. Energy prices—along with other commodities—continue to trend lower, and in some cases have returned to beginning of 2022 levels (Figure 2). We have yet to see signs of broad-based discounting in the retail sector, although reportedly retailers are taking steps to help clear inventories ahead of the Christmas shopping season. Finally, at some point the stronger U.S. dollar—which is approaching levels last seen in the early 2000s—should feed into noticeably lower tradable goods prices.

FIGURE 3: Share of Goods That Go Out Of Stock (OOS) Per Month

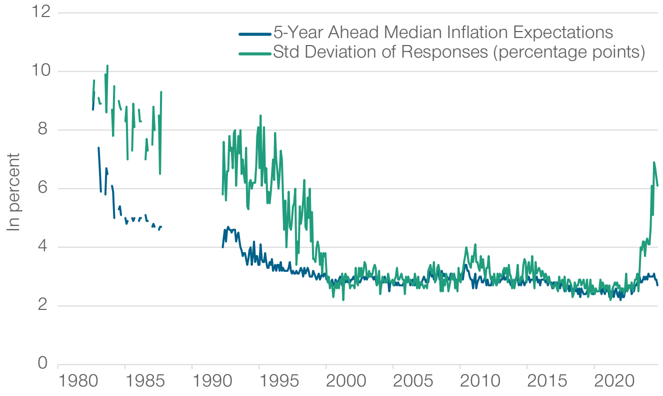
Number of goods gone from shelves



Source: Cavallo, Alberto and Oleksiy Kryvtsov, "What Can Stockouts Tell Us About Inflation? Evidence from Online
Micro Data." NBER Working Paper Series, No. 29209, September 2021.

However, despite this relief, we believe that supply conditions are much worse than is generally assumed, with many items disappearing from shelves (Figure 3). Surprisingly, recent estimates from State Street’s PriceStats research group suggest that supply disruptions still remain widespread, with a rising number of goods disappearing from supermarket shelves. Research has shown that this reduction in the number of goods available helps to lift inflation in subsequent months. This story of

FIGURE 4: Surveys Confirm High Levels Of Inflation Uncertainty
Median and standard deviation of expected inflation



Sources: University of Michigan, Haver Analytics. T. Rowe Price calculations.
As of 30 Sept 2022.

worsening supply conditions is at odds with the popular narrative of oversupplied U.S. retailers. Here, detailed data do confirm a glut of household goods and rising inventories in electronics items. However, those indications of oversupply are masked by the huge decline in available grocery items and medical goods. In our view, this helps to explain why food and other goods inflation remains so stubbornly high.

Additionally, we think agricultural commodity prices are going to remain a wild card into late 2022. Poor weather in Europe threatens the region's agricultural output, particularly in France where the government expects markedly lower field crop production. In the United States, extreme weather has also delayed corn and soybean crops—with middling quality. Moreover, pasture conditions are worsening, which, if it continues, will eventually pressure cattle production. In any event, many of the high frequency indicators that we follow suggest ongoing problems with food supply, reflecting the emergence of many bottlenecks in the sector.

Given the very high level of inflation uncertainty, firms have an easier time maintaining pricing power. Rather than focus on the median point estimate for inflation expectations, a better measure of inflation risk is the volatility of responses around that median. Across a variety of surveys, the dispersion of inflation forecasts is currently extremely wide (Figure 4). This heightened volatility is a worrying sign of inflation expectations possibly becoming unanchored. Already, there are signs in Europe that inflation expectations are becoming unmoored, especially in Britain.

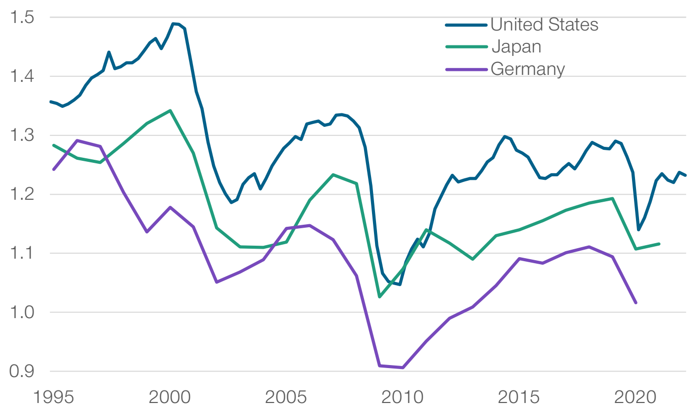
Finally, many forecasters still seem overly optimistic to us regarding the likelihood of a rapid bout of disinflation. Headline inflation forecasts are modestly more realistic, but turning to core inflation, the forecasts still assume a rapid (160 basis point) decline in core PCE inflation from end-2022 to end-2023. A disinflation of this magnitude has only happened three times in the past 60 years. Two of those episodes occurred during or after a recession while the third was during the wage-price controls of the Nixon Administration. Unless the U.S. economy slows very rapidly from this point, it is more likely that we will experience see a more muted pace of price declines in 2023.

Longer-term View on Inflation

The recent weakness of real assets relative to global equities suggests that the market has largely priced in the inflation shock. Asset markets overall, however, are still grappling with the implications of higher inflation; namely, interest rates that are likely to be higher for longer, implying tighter liquidity and lower valuations. There is an inverse relationship between valuations and inflation, particularly in the current environment. As core inflation shocks dominate, there is effectively "nowhere to hide" for investors, as core inflation erodes the value of all assets—stocks and bonds alike. The current response of asset markets we feel has been more consistent with this interpretation than with pricing in a recession—as longer dated duration has sold off more in the past three months than equities.

The valuation shock has yet to affect most of the U.S. real economy, as employment and income growth has until now remained strong enough to support consumption. A decline in manufacturing employment tends to precede recessions by six months or more. Yet, job growth in this sector remains solid. Additionally, forward-looking indicators of investment point to continued, albeit modest, levels of capex spending. Importantly, moderating inflation should lift both survey expectations of

FIGURE 5: 20-Year Plus Slide In Global Capital Spending
Business capex/depreciation, depletion & amortization



Sources: Haver Analytics.
As of 30 June 2022.

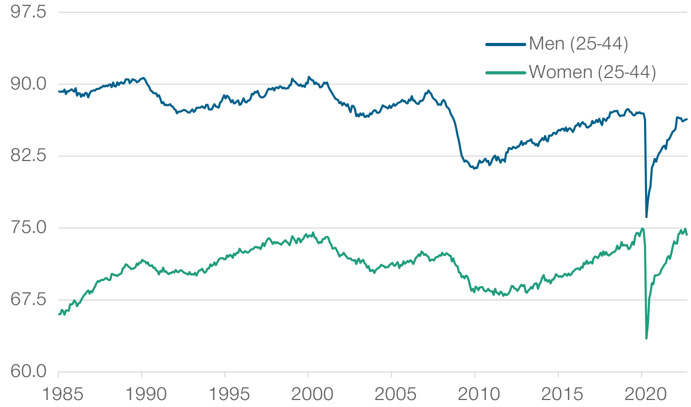
economic activity and real incomes, helping to self-correct the slowdown. This suggests that core inflation could also remain higher.

Longer-term, because the global economy has not had a proper investment cycle, broad swathes of the supply side remain underinvested. Roughly speaking, most developed economies appear to have underinvested over the past two decades. In the real assets sectors, we believe there is still a shortage of U.S. housing, which may keep shelter inflation structurally higher into the medium-term. On the industrial side, mining and energy companies have only recently increased investment—reluctantly—despite near record high prices for their commodities. According to company reports, many firms today appear to want proof that high prices are durable before they commit to large-scale, multi-year investment projects. At the national level, capex spending has been weak, with capex/DDA (dividends, depletion, amortization) trending lower across most developed economies (Figure 6). Even China, which had been a source of and destination for global capital spending, has seen a marked decline in business investment, removing a source of global disinflation.

The labor market also remains undersupplied, with an aging workforce and lack of immigration. By all measures, the labor market has already hit its limit, with little spare capacity. COVID drove an acceleration of retirements for older workers, and once retired they are unlikely to reenter the workforce meaningfully—and certainly not at the same jobs as they once had. Younger workers have already largely re-entered, with only men in the 25-44 age group seeing slightly lower participation rates (Figure 7). Yet, this group is also experiencing a long-run, unexplained decline in employment participation compared to that which existed before the pandemic. Thus, unless immigration were to suddenly and

FIGURE 6: Labor Supply Constrained By Long-Run Decline In Prime Age Males

Employment as share of population: Males aged 25-44



Sources: Haver Analytics.
As of 30 Sept 2022.

surprisingly open up in the next few years, the U.S. labor market looks set to remain structurally tight, putting upward pressure on wages.

With a constrained supply-side, any growth weakness would likely depress investment spending, further damaging the supply side of the economy. During downturns, investment typically falls much more than consumption; it would be reasonable to expect the same in any upcoming recession. Of course, with business capital spending already not enough to fix capacity issues, so any further cuts to spending worsens the problem in three ways. First, any fall in demand would see only a temporary reprieve in inflation, because as the economy exits the recession, the economy would quickly hit supply constraints. Second, during a downturn, maintenance gets deferred, and the existing capital stock would continue to age and depreciate, creating an even bigger supply problem and need for investment. Finally, the ongoing labor shortage would put an even greater pressure on the physical capital stock as firms would need to scramble to replace workers with machines.

CHINA'S STRATEGIC RELATIONSHIP WITH THE U.S.

Generating positive returns in tougher conditions requires new thinking.

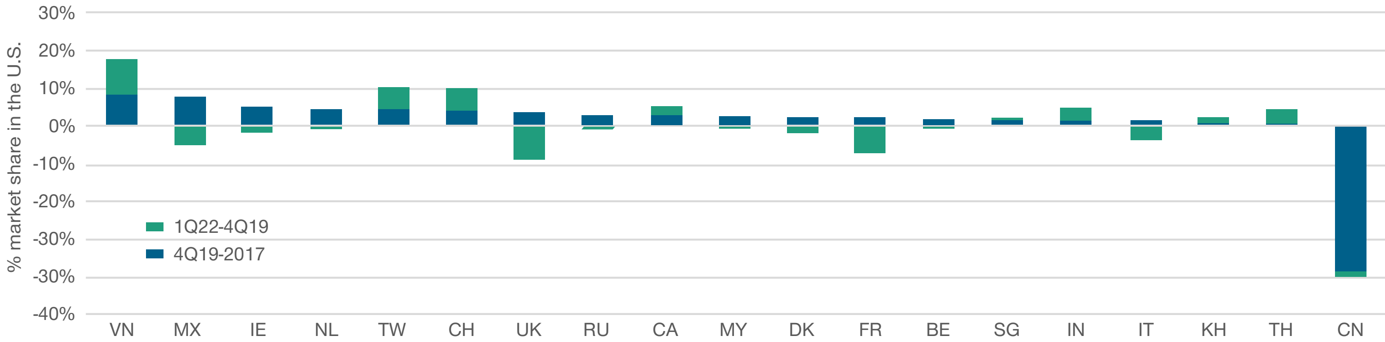
Chris Kushlis
Chief of China and Emerging Markets Macro Strategy

- We do not expect the US to introduce broad economic sanctions against China, but to stay targeted, focusing on technology and national security.
- There will be relative winners and losers from increased China-U.S. competition. Domestic sectors should be better insulated from sanctions-related risks.
- China's domestic market, supply chain depth, high-quality labor force, and efficient infrastructure remain a compelling proposition for many foreign companies.

The topic of US/China geopolitics and the strategic relationship between the two countries is indeed a broad one. This note considers strategic priorities mainly as they relate to engagement between the two countries in the technology, trade and economic spheres. As such, it highlights possible outcomes for the next 3-5 years, including the implications for specific corporate sectors and financial markets. It does not focus on the politically sensitive issue of Taiwan following U.S. House of Representatives Leader Nancy Pelosi's recent visit to Taiwan in August. For the purposes of this report, the status quo with regard to Taiwan is assumed to remain unchanged.

FIGURE 1: China's Share of U.S Market Fell 4.0% After Tariffs

But has changed little since the pandemic (4Q'19 to 1Q'22)



Source: US Census Bureau.
As of March 31, 2022.

Recent History: Relations with China Since 2018

Import tariffs

The first indications that Washington wished to reset trade and geopolitical relations with China came when the Trump Administration began imposing tariffs on imports from China in mid-2018. The first set of import tariffs were modest, covering just USD34 billion worth of Chinese goods under the Section 301 regulations. However, the list of U.S. tariffs on China expanded rapidly over the subsequent fifteen months in four phases, exceeding USD370 billion by September 2021 at tariff rates which ranged from 7.5% to 25%.

Under President Biden, the China tariffs inherited from the previous U.S. administration of President Trump have been the subject of much recent debate, with signs of disagreement between the various U.S. government agencies concerned. At times, news reports have suggested that President Biden favors rolling back some China tariffs as a counter-inflation measure. There are mixed views on how big an impact this would have in reducing US inflation.

Early studies showed that Chinese exporters, constrained by thin profit margins, had not absorbed the U.S. tariffs by cutting export prices. Rather, it was U.S. consumers who had borne the brunt of the tariffs on Chinese imports via higher retail prices. Despite this, the beneficial impact of removing tariffs today would be at best marginal set in the context of the current high U.S. inflation. Post tariffs, China's share of U.S. imported goods fell sharply, largely offset by increased imports from other Asian countries (see Figure 1). This is evidence of substitution by U.S. consumers away from more expensive Chinese goods but may also reflect successful 'tariff hopping' by Chinese manufacturers who relocated their final assembly operations to another country such as Vietnam or Malaysia.

With the U.S. mid-term elections in November, domestic politics suggests now is not the best time for a reduction in tariffs on Chinese imports without matching concessions from China, which are unlikely. Rather, the Trump-era tariffs may be retained as leverage for future bilateral trade negotiations. Given that prices, trade and production have largely adjusted to the Trump-era tariffs without major visible damage, leaving them in place for now should not be a difficult decision for the Biden administration.

Broader China Sanctions

Besides import tariffs, the Trump administration introduced a number of other sanctions against China in 2018, beginning with restrictions on one company, China telecom giant Huawei. The restrictions on Huawei were based on suspicions over the company's alleged close links with the Chinese government. The term "China Sanctions" has since come to refer to the broader range of restrictions imposed on Chinese individuals and companies by the U.S., including more restrictive rules on inward and outward investment as well as on specific companies and sectors. From this point onward, we think the Biden government will be wary in extending the scope of technology restrictions too far since excessive provocation would likely provoke a bigger response from China, while there is also a need to consider the broader negative impact on global supply chains.

In response to the U.S. policies, China passed a series of anti-foreign sanctions blocking laws since 2020/2021. They allow Chinese citizens and companies to sue for damages when they claim to have been injured by foreign sanctions and allows the Chinese government to create a Counter-Control List, aimed at individuals and organizations directly who are involved in applying sanctions. Those on the Counter-Control List could see assets frozen or deportation from the country. Since the most recent legislation in June 2021, we haven't seen any notable implementation of the anti-sanction laws, which China appears to be keeping in reserve.

From January 2021, an Executive Order prohibited all US citizens from transacting in the publicly traded securities of companies designated as having close links to the Chinese military, designated Communist Chinese

Military Companies (CCMCs). The intent of these rules was to mitigate US concerns surrounding Xi Jinping's policy of "civil-military integration." It was feared that China could acquire advanced US technology through nonmilitary supply chains, for use in the development of Chinese military and surveillance capabilities.

In December 2020, the US Department of Commerce's Bureau of Industry and Security (BIS) issued an "Entity List" of 60 Chinese companies with whom any export/re-export/transfer of relevant technology and goods would require a license of approval. The Biden administration has essentially continued with much of the Trump-era non-tariff sanctions against China, having added over 100 companies to the Entity List since January 2021. In July, the White House added five Chinese companies to an export blacklist for trading with Russia's military-industrial sector.

This was the first time Washington had taken actions against Chinese companies for assisting Russia in its war against Ukraine by continuing to trade with/ supply equipment/components to them. Most Chinese companies, including large banks and State-Owned Enterprises (SOEs), have been careful to avoid falling foul of U.S. secondary sanctions on trade with Russia. Bloomberg reported earlier this year that ICBC and Bank of China had stopped financing Russian oil and commodities trades as they were worried about sanctions risk. Trade between China and Russia has nevertheless increased substantially this year, with exports to Russia of USD8.0 billion in August, up 26.5% year-on-year. China's imports from Russia in August grew even more strongly to USD11.2 billion, 59.3% higher than in August 2021, boosted by heavily discounted oil imports (Source: Reuters September 7, 2022).

Foreign Direct Investment (FDI) Flows To And From China

We expect to see a growing role for CFIUS (Committee on Foreign Investment in the United States) in regulating inward foreign investment into the U.S., with the focus clearly on investments by Chinese entities. CFIUS is an interagency government committee that is authorized to review certain transactions involving foreign direct investment in the United States and certain real estate transactions by foreign persons, in order to determine the effect of such transactions, if any, on the national security. In 2018, CFIUS received substantially more resources and a broader mandate to expand inbound investment reviews from 'high risk' countries, particularly China. CFIUS will continue to limit the ability of Chinese persons or entities to invest in military and technologically adjacent companies in the US, with a view to overlooking their facilities.

Even prior to the Covid pandemic there was much financial media discussion of the need to improve global supply chain resilience. Trade experts talked of the need to have one supply chain for the domestic Chinese market and another to meet the needs of the Rest of the World. Few details would be given regarding the costs and efficiencies of switching to such a system. In its most recent position paper, the European Union Chamber of Commerce in China said some of its members were indeed taking that path. The latest figures for total inward FDI paint a somewhat different picture, however. At USD124 billion for the first seven months of 2022, FDI into China was 21.5% higher than in the corresponding period of 2021.

Many foreign businesses in China have been vocal and highly critical of the costs and disruption caused by the continuation of strict lockdowns and zero Covid policy in 2022. But China is nevertheless likely to reopen fully for business at some point next year. Once that happens, such are the long-term attractions of China's domestic markets we may start to hear much less about the need to relocate significant parts of the global supply chain outside of China.

China A Strategic U.S. Competitor in Technology

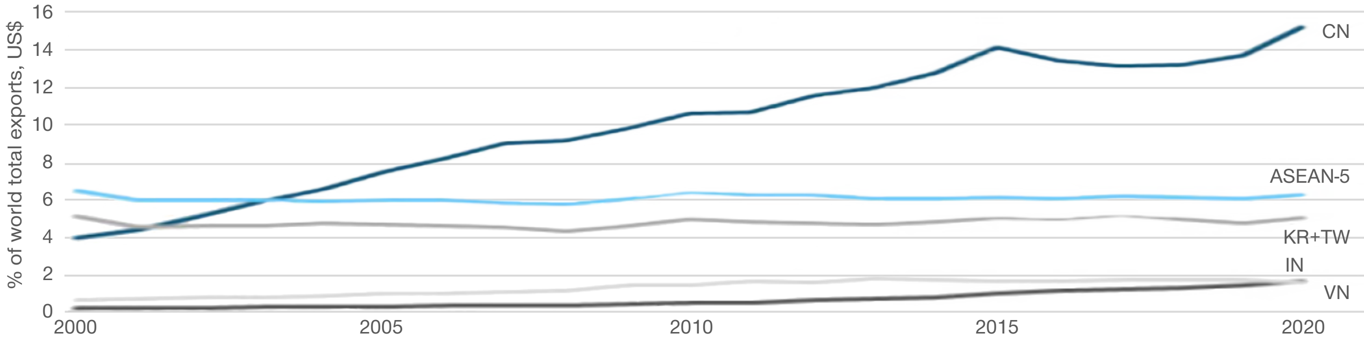
Technology is the primary lens through which US national security officials view long-term strategic competition with China. In their eyes, if the US maintains its edge in key leading areas of technological innovation, it will succeed in the long-term race with China. One can therefore expect future US governments regardless of political persuasion to continue to seek to restrict China's access to leading edge technology in certain key areas such as defense and advanced semiconductors. It is not clear there is much China can do to counter this, other than leverage access to its huge domestic market as an inducement to U.S. and European firms to lobby against further restrictions where possible.

Technology is an area where secondary sanctions could potentially become more common. Secondary sanctions involve restricting the export of items to China by other countries that use US technology as inputs. Currently, these are mostly limited to the export of specific leading-edge equipment to Huawei and SMIC (Semiconductor Manufacturing International Corporation, China's largest domestic manufacturer of semiconductors).

In semiconductors, the U.S. government has successfully blocked China's access to the highly sophisticated capital equipment needed to manufacture the most advanced semiconductors below 12 nanometers in scale. Dutch firm ASML is the global leader, with a monopoly in the leading-edge extreme ultraviolet lithography (EUL) machines. In the short term, U.S. restrictions on ASML's ability to export to China are delaying China's ability to establish a full-scale domestic

FIGURE 2: China's Export Share Was Boosted by the Pandemic

Share of China in world exports in US dollars.



Source: UNComtrade.
As of December 31, 2020.

semiconductor manufacturing ecosystem. However, there are also a number of key technology sectors where China is regarded as being ahead of the U.S., such as in 5G and 6G mobile telecommunications, AI and quantum computing. Also, two of the strongest tech growth areas – electric vehicles and the IoT (internet of things) – need much less advanced semiconductor inputs. China has made good progress in the manufacture of 12nm (nanometer) scale and above, and currently meets 30% of its requirements domestically.

Technology Borders

With technology the main arena of US/China strategic competition, the imposition of 'technology borders' can be expected to limit the free flow of data and information. Merger and acquisition activity (M&A) where China buys U.S. technology assets or vice versa has already fallen to low levels compared to the pre-pandemic period. It is likely to be on pause into the foreseeable future.

Data storage and transfer is an area of technology that poses unique challenges. How foreign companies store US clients' data, including personal information and IP, and who has access to that data have become issues of great concern to the U.S. government. Clearer legal definitions need to be established given the difficulty associated with limiting data transfers across national borders.

Similar to the reshoring theme that we are starting to see in global supply chains, the U.S. authorities may require additional monitoring of US consumer data in addition to physically storing the data within US geographic borders. New rules to define data access rights and monitoring can be expected to increase compliance costs for platform companies.

On the China side, we have seen a significant tightening of internet data storage, usage and distribution. DiDi Chuxing Technology Co., a vehicle for hire company based in Beijing with over 550 million users, was recently hit with a USD1.2 billion fine. China's transport ministry has tightened data storage and data access requirements, requiring regulatory approval if data is to be shared with foreign entities.

The path of gradual decoupling in advanced technology areas seems set to continue. Taken to extremes, such a trend could result in the emergence of two global tech ecosystems based on different standards, one led by the U.S, the other led by China, which could seriously hamper productivity improvements and global growth. It is not inevitable, however, and such a scenario currently appears to be a good way off.

Need to Better Manage U.S./China Economic Relationship

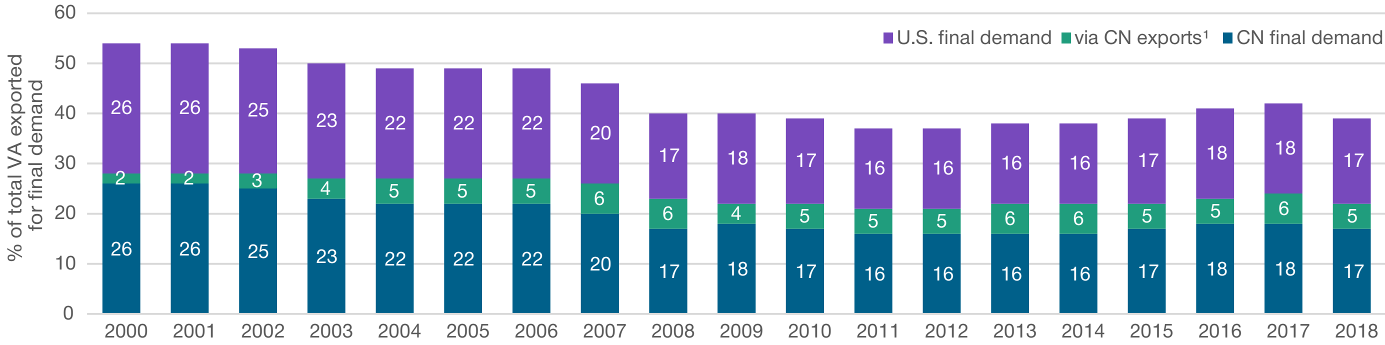
Most geopolitical commentators expect the U.S./China (and increasingly the Europe/China) relationship to remain challenging. The major sources of tension that have arisen since 2018 look set to continue, with few signs of de-escalation. Key areas of contention continue to revolve around technology, national security, and human rights. The biggest challenge of all will be how to preserve mutually beneficial economic, trade and financial relationships despite ongoing geopolitical tensions.

We have seen growing gaps emerge in recent years between the positions of the two governments on foreign policy, trade and human rights. This does not mean that U.S./China relations are doomed to deteriorate across every dimension. Senior officials on both sides recognize that the all-important economic relationship requires active management and engagement if it is to be sustained. The bilateral economic relationship is critical for the health and well-being not just of the U.S. and China but of the global economy (Figure 3). A decoupling that divides the world into two separate economic blocs would be so costly as to be impractical and is an option that few favor.

Amid the ongoing geopolitical heat, there is an urgent need to better manage the key U.S./China economic relationship. China is a top 3 export destination for the U.S., accounting for USD150 billion in export value in

FIGURE 3: China: A Bigger Market For Exporters Than the U.S. Since 2013

Value-added exports by destination market.



Source: OECD-TIVA (2021).

[1] There is some double counting with U.S. final demand.

As of November 17, 2021.

2021, behind only Mexico (USD280 billion in 2021) and Canada (USD310 billion), and notably ahead of Japan (USD75 billion). Soybeans, semiconductors, industrial machines, pharmaceutical products/medical equipment, aircraft and passenger cars are among the most exported U.S. goods to China. China is the third largest auto export market for the U.S., after Canada and Germany. China's large domestic aviation market is also one that the U.S. cannot afford to ignore, accounting for around one quarter of Boeing's aircraft order book.

Outlook: 2023 and Beyond

We do not expect the US to introduce broad, Russia-style sanctions against China. The Biden administration's sanctions posture towards China will continue to be targeted, carefully focusing the most significant actions in the realms of technology and national security, while imposing only limited sanctions in response to what the U.S. perceives as human rights issues.

We expect most of the current China sanctions to remain in place throughout the Biden administration. But we do not expect to see them broaden out to include larger swathes of the Chinese economy. To further expand restrictions on China would risk ending effective cooperation on trade, the economy and climate change, while also inviting litigation at the WTO. We think the overall direction of the U.S./China relationship is unlikely to change significantly with the U.S. presidential elections in 2024. Strategic competition will continue to define how the two countries engage with each other, although the tone of the relationship may vary under a Republican versus a Democratic president.

In terms of the macro-economic impact of a changing U.S./China geopolitical relationship, the need for greater supply chain resilience points to some incremental diversification away from China across various sectors as global manufacturers weigh up higher costs with the risk of business interruption from trade restrictions. This is potentially a negative for corporate margins and could also be potentially inflationary for final-consumers. But there will be winners as well as losers. Neighboring Asian countries and other Emerging Markets like Mexico stand to benefit. That said, China's huge domestic market, supply chain depth, high-quality labor force, and efficient infrastructure built up over the past two decades remains a compelling business proposition for many multinational companies.

So far, Mexico and the Emerging Market Asian economies have gained the most from China's loss of US import market share (Figure 1). Mexico is seen as a potential long-term winner thanks to the successful NAFTA renegotiation, proximity to the US, lower geopolitical risks and an existing cluster of FDI to build upon. However, uncertainty around some of its policies toward the business sector and rollback of energy reforms may undermine its ability to fully take advantage of any relocation of production.

Vietnam is regarded by many as the biggest beneficiary of trade reorientation. Chinese FDI investment in Vietnam via has surpassed Korea as the largest source from 2019 to 2021. Vietnam is seen by most MNCs as the next most attractive FDI destination in Asia for lower value-added and increasingly middle value-added products. Vietnam also appears to be a destination for Chinese companies to set up and circumvent US tariffs by adding a final processing/assembly stage there for products. This coincides with a surge in Vietnam's imports from China since 2020, accompanied by an equally large increase in exports to the U.S.

There will also be relative winners and losers from increased China-U.S. strategic competition within China. Sectors which could potentially benefit against a backdrop of increased sanctions risk are those which engage deeply in China's dual circulation economic strategy and policy supportive sectors – namely, retail and consumer, new energy vehicles, and green energy. Such domestic-focused sectors should be better insulated from sanctions-related tail risk scenarios.

'TIME IN THE MARKET' VERSUS 'TIMING THE MARKET'

Some thoughts on the merits of staying invested.

Rahul Ghosh
Portfolio Specialist,
Global Equity Strategies

The recent spotlight on bear markets and recessions has left many investors grappling with the topic of timing the market. Should one invest ahead of a recession? Has the market bottomed? These are some of the most common questions investors have asked as they consider their next steps.

Such questions add to an age-old debate between 'timing the market' and spending 'time in the market'—or staying invested throughout its ups and downs. Much has been written on this topic, and we think it is worthwhile to highlight certain points that resonate with our belief in staying invested for the long term.

Assessing the Facts

Put simply, market timing is difficult. In our view, the differential investment performance it may generate suggests that it is at best questionable and at worst value-destructive. This is especially so for retail investors who lack the same access to markets and information that professional investors and larger financial institutions have.

- Research from Bank of America (BofA) has quantified the potential opportunity cost for investors who try to get in and out at just the right moment.
- Looking at data going back to 1930, the firm found that if an investor missed the S&P 500's 10 best days each decade, the total return

would stand at 28%. If, on the other hand, the investor held steady through the ups and downs, the return would have been 17,715% (up to February 2021)[1]

Since not many people have the ability to stay invested over decades, or indeed even have memories beyond a couple of decades, let's look at what this might mean over a more recent period and at performance since 2010 on a weekly basis, using the MSCI All Country World Index (ACWI).

The annualized return of staying invested over this period was around 8.6%, compared with -1.4% if a market-timing investor missed the best weeks. What is clear to us is that the logic in BofA's research holds: remaining in the market fares better than trying to time the market, which risks missing out on the best performance periods.

To be fair, as our data also suggests, an investor with the ability to precisely time the market and avoid the worst weeks could have achieved an annualized return of around 20.5%. But this would require the investor to have almost perfect foresight, and we consider such an outcome to be highly unlikely.

Instead, compare the results of staying invested with the results of missing both the best and worst weeks—a pattern that is likely to be more typical for an investor trading in and out of the market. The latter came out slightly ahead with an annualized return of 10.3%. However, it disregards the impact of trading costs and friction in the market that would erode a significant part of the return (not to mention the sleepless nights that the investor could have spent trying to decide which news headlines to act upon).

When the Good Comes with the Bad

Another factor limits the theoretical benefits of market timing in reality: many of the best periods in the market tend to occur near the worst periods. To illustrate this, we tracked weekly gains and losses of more than 3% in the MSCI ACWI since end-2009.

Noticeably, periods of weak and strong performances often occurred in clusters. We think this helps to explain why market timing is likely to result in investors giving up the good, while avoiding the bad. Human behavior studies point to a natural inclination toward loss aversion, driven by the pain of losses outweighing the pleasure of gains. In our view, this potentially leads to investors exiting markets in the wake of weak performances and missing out on upswings.

An analysis of U.S. investor returns bears out this reasoning further. Based on research from Dalbar, the "average investor" in the U.S. earned significantly lower returns than the market, with a large part of the difference owing to attempts to time the market by trading in and out of funds.

What This Means for Investors

None of this is meant to promote a blind adherence to any investment rule or an abandonment of investing to chance. While the amount of time spent in the market can affect returns, so can many other factors, and we think the need to carefully evaluate them plays to the strengths of active professional asset managers like us.

FIGURE 1: Market Timing Can Cut Both Ways

Hypothetical results of a USD 10,000 investment in global equities

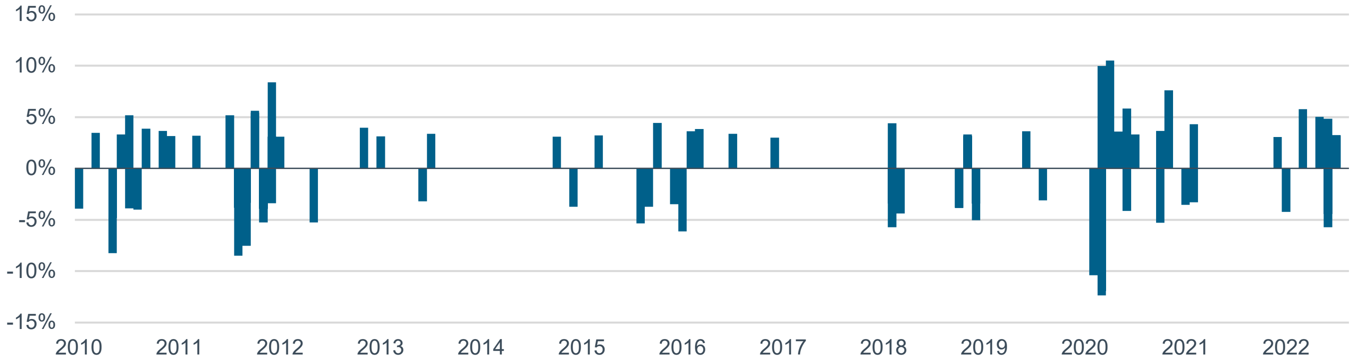
	Investment Value (USD)		Cumulative Return	Annualized Return	Vs Staying Invested
	29 Dec 2009	12 Aug 2022			
Staying Invested	10,000	28,198	1.8x	8.6%	
Missing Best Weeks	10,000	8,366	-0.2x	-1.4%	-10.0%
Missing Worst Weeks	10,000	105,757	9.6x	20.5%	12.0%
Missing Best and Worst Weeks	10,000	34,402	2.4x	10.3%	1.7%

Past Performance is not a reliable indicator of future performance.
Source: Bloomberg Finance, L.P.
This contains hypothetical analysis which is shown for Illustrative purposes only and is not indicative of realised past or future performance. The table above shows growth of USD 10,000 invested in a hypothetical portfolio tracking the historical weekly return on the MSCI ACWI from 29 December 2009 through 12 August 2022. Figures include changes in principal value with dividends reinvested.
See Additional Disclosures for important information regarding hypothetical results.

[1] S&P 500 data includes proxy returns prior to the formal index inception in 1957 and is sourced directly from Bloomberg Finance, L.P.
This contains hypothetical analysis which is shown for Illustrative purposes only and is not indicative of realised past or future performance.
See Additional Disclosures for important information regarding hypothetical results.

FIGURE 2: Market Routs and Rebounds Often Go Hand in Hand

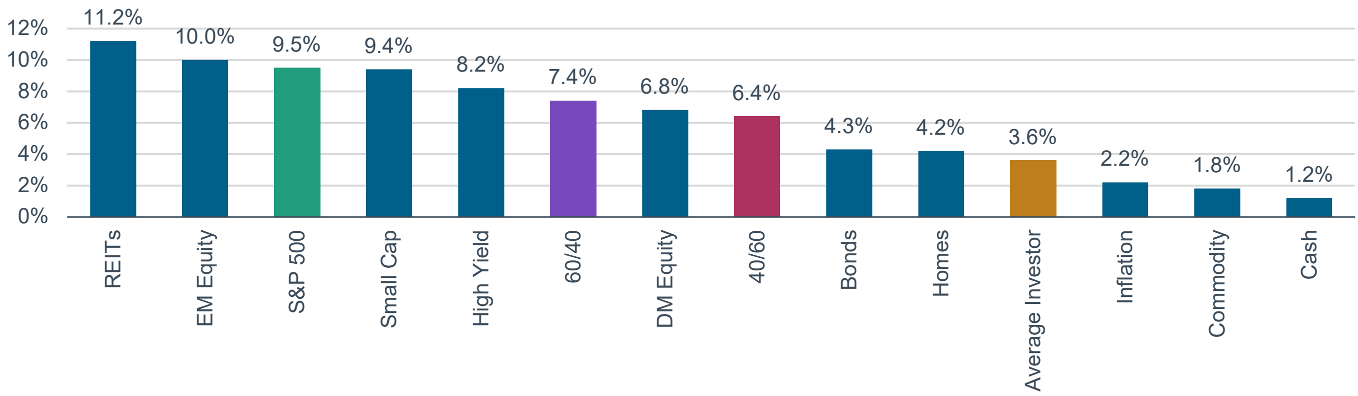
Weekly returns of more than 3% (positive and negative) in MSCI ACWI



Past performance is not a reliable indicator of future performance.
As of August 12, 2022.
Sources: T. Rowe Price analysis using data from Bloomberg Finance L.P.

FIGURE 3: Timing the Market Comes With Costs

20-year annualized returns for a market-timing "average investor" and various asset classes (2002-2021)



Past performance is not a reliable indicator of future performance.
Source: J.P. Morgan Asset Management, Bloomberg, FactSet, Standard & Poor's, Dalbar Inc, MSCI, NAREIT, Russell. Data as of 30 June 2022.
Indices used – REITs: NAREIT Equity REIT Index; Small Cap: Russell 2000; EM Equity: MSCI EM; DM Equity: MSCI EAFE; Commodity: Bloomberg Commodity Index; High Yield: Bloomberg Global HY Index; Bonds: Bloomberg US Aggregate Index; Homes: median sale price of existing single-family homes; Cash: Bloomberg 1-3 month Treasury; Inflation: CPI; 60/40 (40/60): A balanced portfolio with 60% invested in S&P 500 Index and 40% invested in high-quality US fixed income, represented by the Bloomberg US Aggregate Index (and vice versa), with the portfolio rebalanced annually. Average asset allocation investor return is based on an analysis by Dalbar Inc., which utilises the net of aggregate mutual fund sales, redemptions and exchanges each month as a measure of investor behaviour.

1. Fundamentals Matter

BofA data indicates that fundamentals such as earnings growth and revisions tend to be more important drivers of investment returns over time (Figure 4), even if technical factors and positioning can have a greater short-term impact. Figure 4 shows that historically the annualized returns of momentum stocks decreased over a three-year period, while the annualized returns of stocks with top-decile fundamentals in the S&P 500 improved.

2. Valuations are Key

We consider valuations to be another critical driver of investment performance. According to BofA research, although valuations tend to account for a small portion of returns over a one to two-year period, they can drive 60%-90% of subsequent returns over the next 10 years. Price to normalized earnings, price to book, and enterprise value to sales are among useful valuation metrics to watch, from our perspective.

3. Quality Holds Out

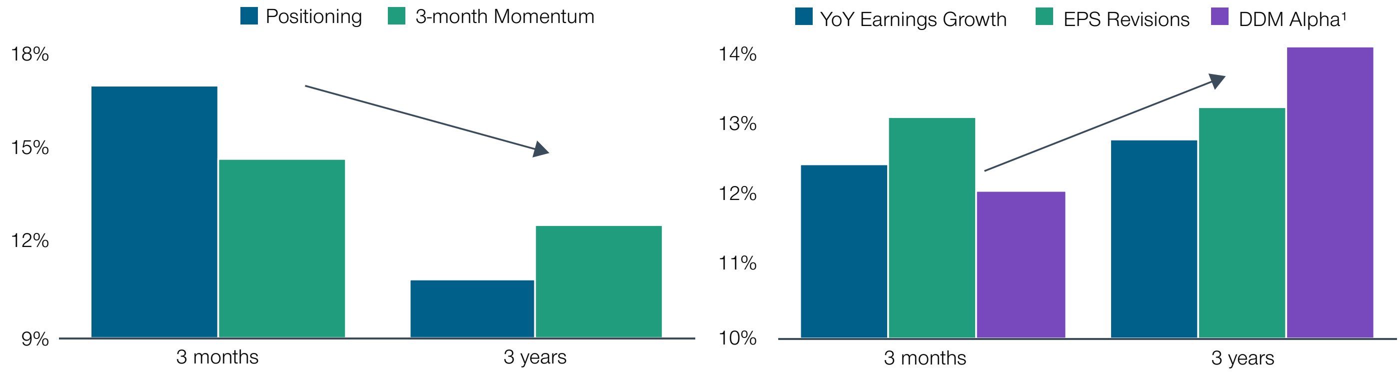
In addition, the research points to quality as a winning characteristic in the long run. From 1996 to 2021, high-quality stocks, even excluding dividends, did not generate a negative return over rolling 10-year periods.

4. Time is a Friend

BofA's research also shows that the risk of losses for equities reduces over time, unlike other asset classes such as commodities. While the study finds that the probability of losing money on any given day is close

FIGURE 4: The Importance of Fundamentals Over Time

Annualized returns of stocks over three months and three years



Past performance is not a reliable indicator of future performance.

[1] Note: Positioning = annualized returns of bottom 10 S&P 500 stocks held by large cap active managers. Momentum = annualized returns of top decile of S&P 500 by 3-month price momentum. DDM Alpha defined as the implied return from the BofA Quantitative Strategy three-stage dividend discount model less the required return from a Capital Asset Pricing Model.

Source: FactSet, BofA US Equity & US Quant Strategy, monthly data from January 2008 to February 2021.

to that of tossing a coin, that probability declines meaningfully over a multi-year period.

Weighing the Key Factors

In our view, the ability to stay in the market and maintain a long-term view is important, and the typical investor who does so is more likely to see positive outcomes than one who tries to market-time. Many other factors also drive returns, creating opportunities for professional asset managers like us to pursue alpha over time.

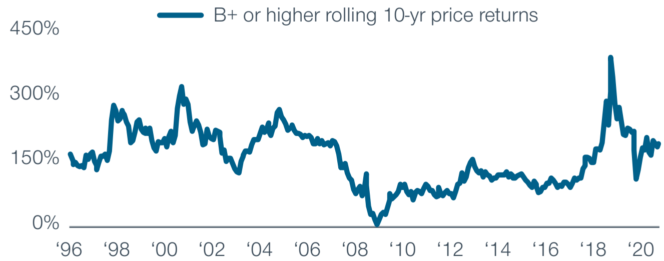
Notably, the factors that various studies identify as long-term performance drivers are some of the same ones that we focus on in our global equity strategies—we seek quality companies, assess business fundamentals, and determine the appropriate valuation to pay for what we wish to own. We think that getting these decisions right matter even more in the long run, supporting our view that active investing requires active choices.

In the last few months, portfolio managers of our large global equity strategies have scrutinized their holdings to assess each company's quality, balance sheet, and earnings durability, while making the necessary adjustments to upgrade their portfolios' exposures to the highest conviction names.

As famed investor Benjamin Graham reputedly said, "In the short run, the market is a voting machine but in the long run, it is a weighing machine." To that we could add, "We also have the ability to choose what it is that we want to weigh."

FIGURE 5: High-Quality Stocks Remain in Style

10-year rolling price returns for stocks (B+ or better S&P Quality rank) (1996-February 2021)



Past performance is not a reliable indicator of future performance.

Source: S&P, BofA US Equity & US Quant Strategy. Most recent data available.

CLICK HERE—HAS THE BOOM IN DIGITAL ADVERTISING PEAKED?

Four key factors set to shape the outlook for digital advertising.

Taymour Tamaddon
Portfolio Manager,
T. Rowe Price US Large Cap

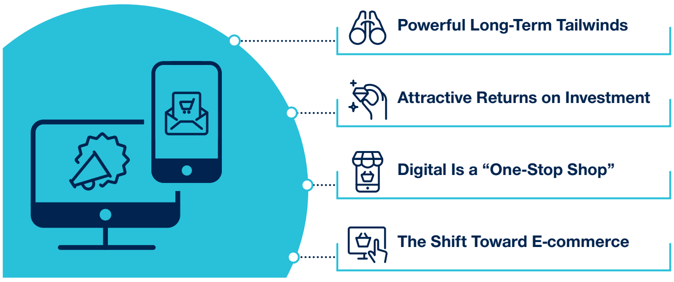
- From relatively low penetration a decade ago, digital advertising today serves as the primary platform for most companies' marketing activity.
- However, a confluence of factors is contributing to a current recession in digital advertising spending, raising questions about the sector's long-term growth profile.
- Yet, powerful structural characteristics supporting the industry are central to its longer-term prospects.

The growth in digital advertising spending in recent years has been nothing short of spectacular. From relatively low penetration a decade ago, digital advertising today serves as the primary platform for most companies' marketing activity. And it's not difficult to see why.

More efficient and quantifiable than any other advertising solution, digital advertising offers superior returns on investment. Recently, however, various factors have combined to negatively impact the digital sector. Has digital advertising reached its peak, and can the growth profile of previous years be repeated? Here we look at four key reasons why the near-term challenges digital advertising faces are expected to be a temporary blip on the industry's longer-term growth profile.

FIGURE 1: Digital Is the New Norm

Targeted, multi-channel, advertising providing easily measurable results



1. Powerful Long-Term Tailwinds

The powerful tailwinds that have supported the rapid growth in digital advertising over the past decade—growing internet penetration, rising popularity of smartphones, increase in social media usage, rising penetration of e-commerce, increased investment in technology and digital platforms—are very much intact, and it is these same tailwinds that are expected to underpin growth moving forward. These secular trends show no sign of abating, and as has been the case over the past decade, we expect digital advertising to continue to outperform other forms of media for years to come.

The past year has been illuminating in the sense that it has highlighted the underappreciated cyclicality of digital advertising. Amid a more volatile macro environment, where spending visibility has become less clear, it has been a little surprising to see how quickly companies have moved to cut the digital portion of their overall marketing budgets. Nevertheless, despite the recessionary period we are currently seeing, the long-term potential that digital advertising offers is hard to deny. This is down to one reason in particular—superior returns on investment.

...the long-term potential that digital advertising offers is hard to deny. This is down to one reason in particular—superior returns on investment.

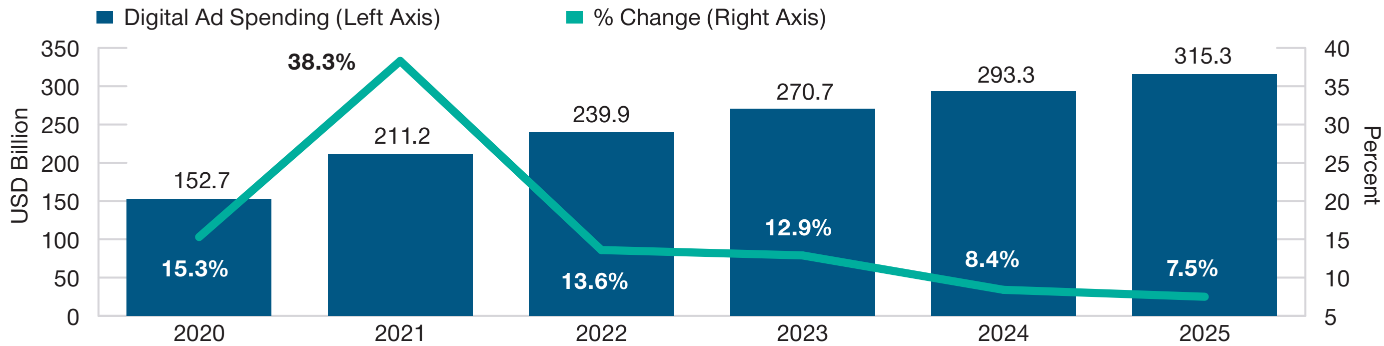
2. Attractive Returns on Investment

Digital advertising seeks to offer companies superior returns on invested capital. Advertising no longer needs to be a case of going in blind. Instead of generic advertisements aimed at no particular audience, the data-driven nature of digital advertising provides more accurate, measurable, and immediate customer feedback. This allows marketing teams to plan campaigns in a much better—and more targeted—way, zeroing in on a specific audience and providing tailored offers or products to the very people most likely to act on those offers. This compares with more traditional avenues like print media or billboards, which provide zero feedback or customer insights.

It is also worth noting that, despite the sharp deceleration in digital ad spending seen in 2022, which also needs to be considered in the context of the pandemic-distorted levels of 2021, the U.S. digital advertising market is expected to continue to grow at a steady pace. Spending in the U.S. is anticipated to surpass USD 300 billion by 2025, which will account for roughly 75% of all media spending (Figure 1).[1]

FIGURE 1: U.S. Digital Advertising Spending, 2020–2025

Anticipated growth in percentage and USD billion terms



As of October 2021.

Past performance is not a reliable indicator of future performance.

Includes advertising that appears on desktop and laptop computers as well as mobile phones, tablets, and other internet-connected devices.

Source: eMarketer. Analysis by T. Rowe Price.

[1] Insider Intelligence, April 2022.

3. Digital Is a “One-Stop Shop”

The one-stop shop nature of digital advertising should see it continue to take market share from other, more traditional, advertising channels. Whereas print can only serve text and picture ads, radio only audio ads, and television only video ads, the internet can serve all of the above and more. As such, digital advertising is likely to continue cannibalizing these legacy advertising forms. The internet wraps all of their individual strengths into one.

4. The Shift Toward E-commerce

Additionally, the shift toward e-commerce, which was significantly boosted by the restrictions imposed during the coronavirus pandemic, is turning more consumers away from brick-and-mortar retail and toward online shopping. This is creating greater opportunities for digital advertisers to reach an ever-growing online consumer audience.

Short-Term Challenges

Digital advertising spending soared during pandemic-induced lockdowns because of increased screen time and new digital advertising channels, but more recently, a confluence of factors has caused the market to cool down considerably.

- First, the lockdowns provided a vast captive audience for digital advertising. Now that they are over, people are returning to everyday life. That means less time on screens so less time to see ads.
- The market environment has become more difficult. Higher inflation has caused businesses to reexamine spending, while also pushing consumers to spend less. The last 12 months have shown us how quickly digital spending can be turned off in the short term—much more easily than TV advertising, for example. That said, over the medium term, digital advertising is expected to recover, while TV advertising contracts are likely to be renegotiated lower at renewal.
- The digital advertising landscape has also been shaken up in a big way by the privacy and tracking changes introduced by Apple on its iOS platform in April 2021. The implementation of Apple’s App Tracking Transparency (ATT) feature to its iOS system requires platforms to get permission from users in order to track their activity while using iPhone and iPad devices. For digital advertising companies, where collecting and analyzing user data is crucial, this has effectively changed the rules of the game and forces companies to adapt to a new landscape.

Data Privacy and Tracking Changes

This latter challenge—Apple’s introduction of the ATT feature—is particularly noteworthy in that it has had very different impacts on two of the dominant players in the digital advertising space. For Alphabet and Meta, for example, the impact of the changes to Apple’s privacy rules is far more negative for one company than the other.

Meta has underperformed significantly over the past 12 months, to the point that it is currently trading at less than 15x 2023 earnings, the cheapest valuation it has been for a long time. The introduction of Apple’s ATT feature to its iOS platform has proved a major blow for social/interactive media companies in particular, as companies like Meta rely on this data to target and measure ads on their apps. Meta estimates that Apple’s ATT feature will decrease the company’s 2022 revenue by around USD 10 billion, as the majority of iPhone and iPad users are choosing to opt out of ad tracking.

Alphabet in comparison, has posted stronger performance in recent quarters, as it is less impacted by the privacy changes made by Apple to its iOS platform. A main reason for this is that Alphabet organically collects vast amounts of user data through its search engine, making it much less vulnerable to users opting out of mobile online tracking through Apple’s ATT feature. Alphabet also collects data from its 3 billion Android operating system devices worldwide—devices that are little impacted by changes to Apple’s operating system. As such, Alphabet is retaining more of the valuable information pertaining to consumer buying intentions and habits, which makes its platform more attractive to advertisers.

Whether the decrease in digital advertising spending is a downturn or just a stabilization, the near-term impact of the post-pandemic environment on advertising and related industries is undeniable. Companies that overextended during the pandemic by increasing ad spend or head count are now pulling back. Longer term, however, we anticipate spending growth to resume to a more normalized path. The digital advertising market is expected to remain robust as more advertisers turn to digital for the considerable benefits it offers compared with traditional media channels, including greater targeting and measurability. In terms of the leading incumbents in the space, we prefer those businesses that are masters of their own fortune, in this case, data collection—the lifeblood of digital advertisers—rather than reliant on collecting this data via others. ■

HOW VALUE CAN BENEFIT FROM A NEW INVESTMENT CYCLE

Four factors set to drive a boom in capital expenditure.

- There has been large-scale underinvestment from both corporates and governments since the global financial crisis.
- However, we have identified four factors that can help drive a new capital expenditure cycle.
- Many of the companies that are likely to benefit from a new capex cycle reside within value-oriented areas of the market.

Ernest Yeung
Portfolio Manager,
Emerging Markets Discovery
Equity Strategy

The changing of the guard in terms of value versus growth has been attributed to the post-pandemic recovery, decade-high inflation, and the potential for aggressive monetary tightening. However, as bottom-up investors, we are excited about the potential for a new capital investment cycle forming after many years of underinvestment. For value investors, this is a positive development, as increased spending can be a significant source of investment opportunities.

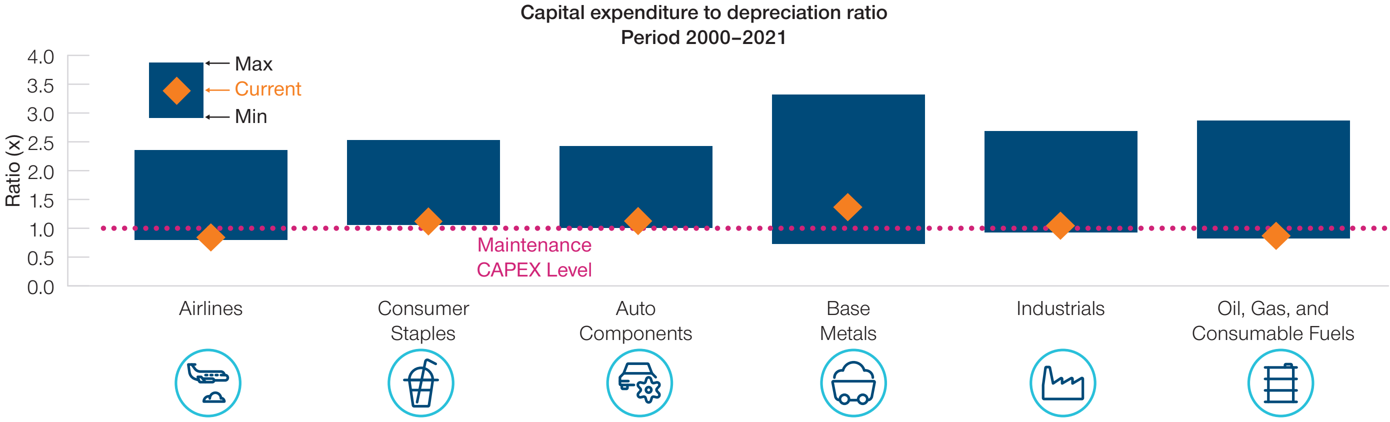
> ...we are excited about the potential for a new capital investment cycle forming after many years of underinvestment.

Case for a New Investment Cycle

Since the global financial crisis (GFC) in 2008, we have seen large-scale underinvestment from both corporates and governments. Both policymakers and companies have focused on repairing balance sheets. Many industries have invested only at "maintenance capex levels," rather than investing to improve productivity or expansion (Figure 1).

FIGURE 1: After Years of Underinvestment, a New Capex Cycle Is Forming

Many companies have been investing only at maintenance capex levels



As of December 31, 2021.

Source: Financial data and analytics provider FactSet. Copyright 2022 FactSet. All Rights Reserved. Most recent data available.

We believe many industries are now long overdue investment, after many years of neglect. A good example is the shipping industry, which has seen a dire lack of investment for years—from port capacity to ships. As the world recovered from the pandemic and demand returned, the industry has struggled due to the lack of investment. This has caused a backlog at ports and a sharp rise in container prices.

Infrastructure Spending Is Well Overdue

We have heard phrases like "build back better" and "leveling up" as governments seek to recover after the pandemic. However, we have seen a chronic lack of investment at a top-down level ever since the GFC, despite an era of ultralow financing costs. There are a number of interrelated reasons for this, but a major one has been the anemic economic rebound we have witnessed after the financial crisis. In previous economic cycles, economic recoveries have been much stronger, but economic growth in recent years has frequently undershot expectations. Meanwhile, at a corporate level, the lack of demand anticipated by companies is likely the reason for the past lack of investment spending. Businesses that aren't predicting higher demand are less likely to invest.

> ...we believe the inflationary environment can be the catalyst to drive increased spending and awaken entrepreneurial spirits....

Looking forward, with the cost of everything going up (including wages), we believe the inflationary environment can be the catalyst to drive increased spending and awaken entrepreneurial spirits (at both a company and government level). We have identified

FIGURE 2: Four Drivers of Increase in Capital Expenditure

Inflation and fiscal spending to drive investment in the near term, while deglobalization and the green transition should support capex in the future

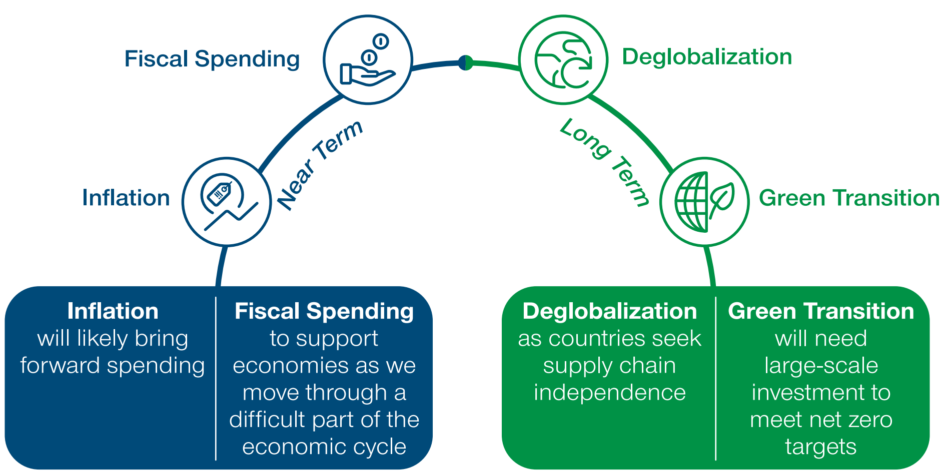
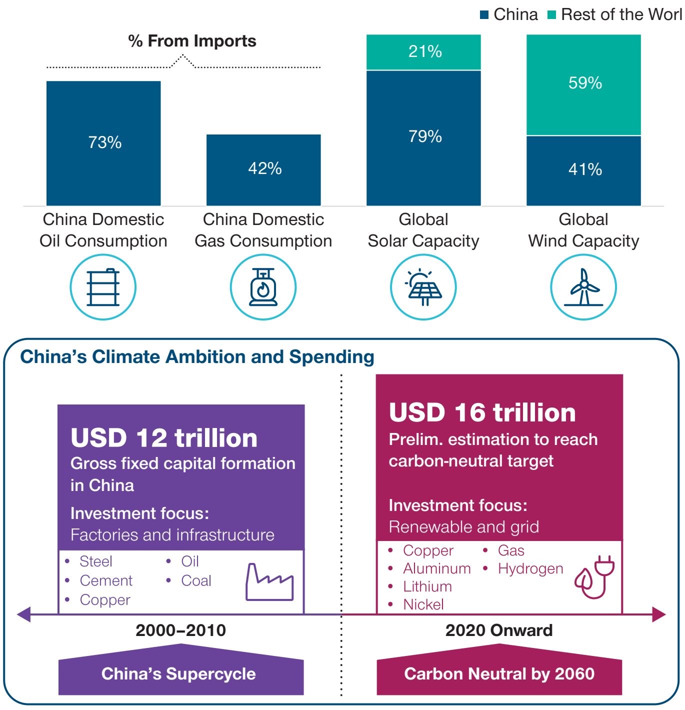


FIGURE 3: China Needs to Spend to Meet “Green” Targets

Spending forecasts far exceed China’s supercycle



As of March 31, 2022.
Sources: SolarZoom, CPIA, Jefferies estimates, Credit Suisse. © 2022 CREDIT SUISSE GROUP AG and/or its affiliates. All rights reserved.

both near- and long-term reasons why a capex boom could be underway.

Near Term—Inflation

Returning demand after the pandemic has met with disrupted supply chains, whether that be through China’s zero-COVID policy (periodically closing important manufacturing hubs) or Russia’s invasion of Ukraine (sending energy and agriculture prices sharply higher). Although we expect inflation to peak at some point as demand destruction takes hold, it is likely, in our view, to settle back at higher levels than experienced in the post-GFC environment.

A major factor will be what we are calling “geopolitical inflation.” We believe it is unlikely that the conflict in Ukraine will be resolved quickly, and geopolitical tensions have also risen between China and Taiwan and—subsequently—China and the U.S.

> “...heightened geopolitical friction is likely to prove inflationary as tensions remain elevated and supply chains continue to be disrupted.

This heightened geopolitical friction is likely to prove inflationary as tensions remain elevated and supply chains continue to be disrupted. However, these inflationary pressures should encourage firms and governments to invest sooner—given that delaying would mean higher costs in the future.

Near Term—Fiscal Spending

We expect greater fiscal spending and investment to support economies, especially as countries move through a difficult part of the economic cycle. This is likely to come in the form of increased handouts to consumers (tax cuts, energy caps) and greater spending on infrastructure projects to help drive growth. Both of these are inflationary unless they are managed in a fiscally neutral way.

Infrastructure is very much the backbone of any economy and helps to provide the framework for both economic growth and modernization, but it has been neglected for many years. Historically, expenditure on infrastructure has been the primary responsibility of governments or policymakers, but governments are increasingly entering into public-private partnerships with companies.

Importantly, the inelastic demand, high barriers to entry, and monopoly-like characteristics of many infrastructure and utility assets mean that their financial performance is not as sensitive to economic cycles as others. These companies also tend to offer higher pricing power and, therefore, better inflation protection.

Long Term—Deglobalization

Deglobalization is already underway. We first heard about the potential in 2018 when the U.S.-China trade war ignited, but concerns have increased with the onset of the Russia-Ukraine conflict and supply chain disruptions stemming from the pandemic. This has focused policymakers’ minds on securing supply chain independence. With companies struggling to manufacture and deliver products throughout the pandemic, many companies are now telling us of their plans to regionalize, or “onshore,” their supply chains, despite the potential economic ramifications.

Long Term—Green Transition

Many countries have set ambitious carbon reduction targets, but achieving them will require huge levels of investment. China is a great example, being the world’s largest fossil fuel emitter. Currently, China imports 73% of its oil and 42% of its gas needs (Figure 2). However, it has plans to take advantage of

USD 16 trillion

Estimated amount for China to meet its carbon neutrality goal by 2060.

its dominance in solar and wind capacity to make greater use of renewable energy that will allow it to become much more self-sufficient. With China having spent around USD 12 trillion during its supercycle from 2000 to 2010 (building roads, bridges, airports, and other infrastructure projects), it is now forecast to spend almost USD 16 trillion on its green transition to meet its carbon neutrality goal by 2060.

New Capex Cycle Could Drive Better Returns for Value-Oriented Companies

With a new capex/investment cycle in the offing, we expect this to support earnings growth, particularly in areas like utilities and industrials. Meanwhile, with inflation likely to remain elevated, we expect central banks to continue to raise interest rates, benefiting financials—banks in particular. With financials, industrials, and utilities making up large parts of the value investment universe, we are excited about the potential opportunities that lie ahead.

MEET WENTING SHEN

An interview with Wenting Shen
Portfolio Manager, Global Multi-Asset Team

Wenting Shen
Portfolio Manager, Global Multi-Asset Team

BIOGRAPHY

Career

Wenting Shen is a solutions strategist and portfolio manager in the Multi-Asset Division of T. Rowe Price. She is responsible for engaging clients and prospects in the Asia-Pacific region in consultative discussions to identify how T. Rowe Price can best meet their investment needs and objectives through the firm's broad equity, fixed income, and asset allocation investment capabilities. She is a vice president of T. Rowe Price Group, Inc., and T. Rowe Price Singapore Private Ltd.

Wenting's investment experience began in 2006, and she has been with T. Rowe Price's Multi-Asset Division since 2018. Prior to this, Wenting was employed by BlackRock as a lead strategist for model portfolios with their Multi-Asset Strategies Group in Asia-Pacific, responsible for developing and managing investment solutions involving multiple strategies and asset classes. Wenting was also previously employed by J.P. Morgan Investment Banking division as an investment banking associate.

Professional & Education

Wenting earned a B.A. in economics and art history from Williams College and a dual master's degree in Luxury Brand Management from POLIMODA, Italy's top fashion design and marketing school based in Florence.

Wenting, can you begin by telling us a bit about your background and what made you decide to pursue a career in asset management?

Well, I went to university in the U.S and studied economics and art history. This an unusual combo, perhaps, for a financial professional. But it is one which I believe has given me a broader perspective and outlook. Several investment banks came to our campus to recruit, and my first job was as an investment banking analyst at a major U.S. bank, with my internship split between New York, Hong Kong and Beijing, giving me an early introduction to different office cultures.

In Hong Kong and Beijing, I really enjoyed the vibrant Asian culture. In Asia, you also as a junior person have more exposure and access to senior management and clients. So, I joined J.P. Morgan as a full-time analyst in Hong Kong, where I have spent most of my career. After a few years in investment banking, I decided to take a break and went to Italy, where I completed a master's degree in Luxury Brand Management in Florence, Italy. My course was an opportunity to study at one of Europe most famous fashion centers, Florence, and also spend time getting to know and understand fashion's fastest growing emerging market, Shanghai. As such, it matched the economics of my first degree to the rapid growth of the fashion industry in China and art history to fashion trends and design.

Taking a gap year was essential for me to explore different fields and realize that I wanted to pursue a career in finance. So I returned to J.P. Morgan and later took an opportunity to switch to the 'buy side' as an investment strategist for i-Shares at Blackrock, learning all about ETFs (Exchange Traded Funds) as an asset class. It was a steep learning curve for me to understand how to integrate passive instruments into a portfolio of bonds and equities. In 2012, Blackrock started a portfolio solutions group, which I joined as the APAC representative. This was a chance to build up a new business from the ground up, a rare opportunity to work for such a large platform as Blackrock and yet still have the scope to be in a more entrepreneurial role.

Fast forward to 2018 when I became the second APAC multi asset hire for T. Rowe Price. It was a great opportunity to help the firm build out its APAC multi-asset business, leveraging my past experience to create customized solutions for our clients. So that's basically what has brought me here to where I am today.

How have your responsibilities evolved within T. Rowe Price?

When I joined there were just two of us covering Multi-Assets for the whole of Asia Pacific. At the time, many of our regional clients did not know that T. Rowe Price was one of the world's biggest multi-asset

managers, focused primarily within the U.S. So here we were, a small team wearing the hat of portfolio solutions strategist. In the first couple of years we had to go out to meet prospective clients and talk multi-asset solutions, getting to feel comfortable with that approach.

We started winning business, being appointed to manage customized multi-asset mandates in Asia. We naturally started to spend more time on portfolio management for these customized mandates. My roles and responsibilities would be split between being a solution strategist, which is essentially a kind of financial architect, forming a bridge between T. Rowe Price's extensive investment platform and the client. One had to really understand the investment needs of each client and how to bring our best investment thinking to them. Essentially, the business is to develop customized mandates for our clients in Asia Pacific.

Besides the Global Multi-Asset team for APAC, I am also a member of the Asian Regional Investment Committee. The committee consists of a group of senior T. Rowe Price investors drawn from the equity, fixed income and multi-asset investment teams. We meet regularly to discuss our views on the current market environment, and where we think the biggest opportunities and risks lie, and how these might be translated into portfolio action, taking into account conviction and risk budget. I am also on the Board of Directors for the Singapore equity business, which gives me the chance to participate in understanding and managing the business needs of the firm.

Can you please discuss your approach as a Multi-Asset portfolio manager. How do you generate value on behalf of your clients?

As a multi-asset portfolio manager our team will be responsible for the strategic design of the client's portfolio to best suit them. Besides the investment needs and constraints of our clients, this also requires a deep understanding of the regulatory environment across the region. As you know, Asia is not a homogeneous region financially, and every country and market segment may have their own unique requirements. So in this respect, it is an advantage for us the manager to be located in the same time zone as our clients.

As a portfolio manager in the Global Multi-Asset team, I will participate in the life cycle of a product mandate from inception. The strategic design of a portfolio is important if the client's investment needs are to be fulfilled over the longer term. On a day-to-day basis, I am also responsible for tactical asset allocation (TAA). In a nutshell, delivering a multi-asset portfolio to the client involves delivering the whole of the firm, with insights across all asset classes.

What are the challenges for a Multi-Asset manager in adjusting to today's higher inflation regime?

First of all, we are seeing the breakdown of the historic correlation between stocks and bonds, which impacts diversification. As we have seen in the first half of this year, the correlation of equities with bonds spiked significantly, with both asset classes moving in the same direction, substantially reducing diversification opportunities. The traditional sixty/forty balanced portfolio (60% in equities, 40% in bonds) has suffered one of the worst selloffs ever in 2022. For long-only multi-asset managers, there have been very few places to hide in this bear market. I think we must recognize the importance of the changing market environment. But breaking it down into different correlation regimes may not be the best way to understand where we are today.

Also, in terms of the shift in the inflation environment, this is unprecedented in many, many years. After Lehman and the Global Financial Crisis in 2008 we have had decades of no or low inflation combined with low or zero interests. Many investors, myself included, have not lived through a prolonged period of high inflation. The sudden change of regime is an alarming prospect, as investors tend to fear what they are unfamiliar with. Some are looking to the 1970s as the playbook for inflation, which may prove too simplistic. The inflationary outlook is clearly highly uncertain at this point and requires more thought and attention from portfolio managers and investment teams. To the extent that inflation increases the performance dispersion between winners and losers, security selection becomes very important, and this should be beneficial for active stock pickers. Challenges also bring opportunities as well as risks.

How important is quantitative analysis to the Multi-Asset team's investment approach?

Both qualitative and quantitative methods are important to the Global Multi-Asset Team's approach. At our global asset allocation meetings, investment committee members will be presented with a report containing one hundred and fifty pages of economic and market indicators and quantitative models that help form the background to an in-depth discussion on markets and portfolios. This represents the quantitative input to our asset allocation discussions.

But a quantitative model is only as good as the input that feeds into the model. And there is no single model that can adequately account for the various forces impacting the pricing of risk assets at any given point in time. So quantitative analysis supplements but cannot replace our portfolio managers' judgment calls. The latter are of vital importance for every asset call, based on the investment committee's collective experience across many different market cycles. Part of the task could be thought of as identifying the most relevant indicators and data upon which to base informed decisions given the current market conjuncture. While both fundamental and quantitative analysis are important to multi-asset portfolio construction, I would give a subjective weight of around 80% to the former and 20% to the latter as a rough order of magnitude.

Can Environmental, Social, and Governance (ESG) concerns be included within a Multi-Asset framework?

I think that ESG concerns can and should be included in a multi-asset analysis. As a caveat, ESG is still a relatively new field, particularly for multi-asset portfolios. So we are doing a lot of research currently to better inform our portfolio decisions by incorporating ESG factors in our analysis. While much of this work is still in the research or fund design stage, I am confident that T. Rowe Price's global multi-asset team is moving in the right direction.

For example, our SICAV[1] funds are already Article 8 compliant[2] and we are developing a number of Impact Funds that are more ESG aware. T. Rowe Price also has its own team of ESG analysts that maintain proprietary models of ESG scores at the company or issuer level via their Responsible Investing Indicator Model (RIIM). The global multi-assets team can leverage the RIIM's bottom-up ESG scores by aggregating them across multiple dimensions, such as at the sector or industry level. This provides one way of integrating ESG analysis into Multi-Asset portfolios.

Wenting, can you share your views on the importance of Diversity, Equity and Inclusion (DEI) within global asset management?

I strongly believe that Diversity, Equity and Inclusion in the investment industry is not a 'nice to have,' but a 'must to have' for asset management. In today's dynamic business environment, having a diverse, equitable, and inclusive workforce is really a business and cultural imperative. At T. Rowe Price, our long-held reputation for excellence and reliability is made possible by the diverse backgrounds, perspectives,

[1] A SICAV is a collective investment scheme or mutual fund vehicle that is common in Western Europe.

[2] Article 8 of the EU's Sustainable Finance Disclosure Regulation requires financial service providers including asset managers to assess and publicly disclose ESG considerations related to their products.

talents, and experiences of all our associates. It is therefore important for our business that T. Rowe Price includes a wide range of different views and arguments from our investment professionals from different cultures, genders and backgrounds.

We have a wealth of readily available information in today's world of instant communications and online data. But the key question for me is how do you successfully integrate and interpret so much information? It is important to recognise that investing is really more art than science. Having a healthy debate among colleagues with different views can help us to avoid blind spots and become better investors. Attracting and developing diverse talent globally helps T. Rowe Price to create greater value for our clients and a better work experience for our associates. We always strive to build diverse teams and an inclusive environment where everyone feels a sense of belonging. We embrace collaboration and pursue excellence with passion, humility, and integrity. DEI helps to create an environment where every associate can thrive, which in turn allows us to sustain the excellent results that clients expect from T. Rowe Price.

Finally, can you please share with us your personal interests and how you relax outside of work?

I have two children, six and eight years old, so my focus in the past few years has been on how to balance work and family duties. When the kids were very small, they would require almost all of my time. Now they are at an age where they are becoming a bit more independent. This allows me to devote some of my spare time for reading, meeting up with friends to socialize etc. It also allows me to do more time to network and mentor, where I am a member of the Financial Women's Association of Singapore.

ABOUT US

T. Rowe Price is a global independent investment management firm. We are solely focused on long-term results for our clients, managing a full range of investment strategies in multiple asset classes. For over 80 years, our consistent investment approach has helped us focus on promising opportunities while at the same time carefully managing risk.

We established our Tokyo office and Hong Kong office in 1982 and 1987 respectively, and since then we have expanded our business by operating in Australia and Singapore. Today we have more than 200 associates based locally.

INDEPENDENT ASSET MANAGER
Our sole business is managing our clients' interests

ALIGNMENT OF INTERESTS
We are a publicly listed company with substantial employee ownership

FINANCIAL STRENGTH
We carry no outstanding long-term debt and maintain substantial cash reserves

GLOBAL EXPERTISE
Continually growing global team of investment professionals

Founded in
Baltimore, USA in 1937

USD1.23
trillion in assets under management[1, 2]

838
investment professionals worldwide[3]

Local presence in
16
countries[3]

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[1] *Firmwide AUM includes assets managed by T. Rowe Price Associates, Inc. and its investment advisory affiliates.*
[2] *As at 30 September 2022.*
[3] *As at 30 September 2022*

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