LYELL WEALTH MANAGEMENT

AUGUST 28, 2023

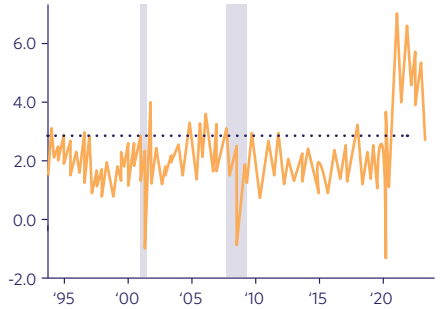
2023 Snapshots

Lyell Wealth Management invests substantial resources in proprietary research in order to distinguish real economic and market data from the narratives pushed by the advertising-driven financial media. We periodically publish a Snapshots issue that compiles charts and tables that we think are interesting and relevant. While there may not be a single unifying theme tying these charts together, the goal is to provide insight into the data that Lyell Wealth Management believes is currently relevant but perhaps not widely publicized.

The U.S. Federal Reserve ("Fed") has been the most aggressive of the major central banks in terms of rate increases, as it impatiently attempts to shove inflation back to its 2% target. Its preferred inflation measure is the Personal Consumption Expenditure Index ex-Food and Energy ("Core PCE"). Evercore ISI estimates that July's Core PCE release will indicate that the three-month annualized rate of change is 2.6% (Chart 1). Government inflation data lags economic reality which can be problematic during economic turning points. For example, the real estate technology platform RealPage tracked July's effective rent growth at only 0.8% year-over-year, while the U.S. measure for Shelter PCE cites an estimated 5.8% (Charts 2 and 3). July's Core PCE ex-shelter is estimated to be 1.3%, back in the middle of its historical range (Chart 4).

CHART 1

U.S. Consumption Price Deflator Core
3 Mo. % A.R. | Jul: 2.6% e



Source: Evercore ISI

CHART 2

U.S. Effective Rent Growth (RealPage)
Y/Y% | Jul: 0.8%

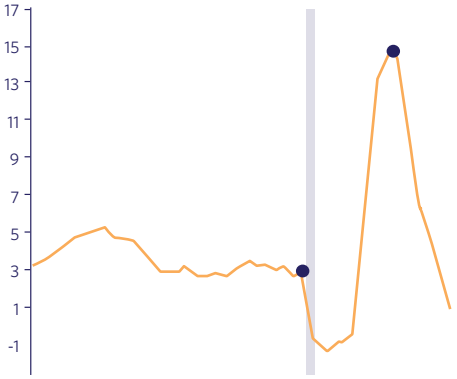
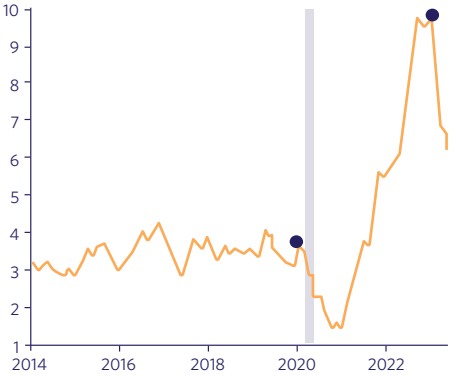


CHART 3

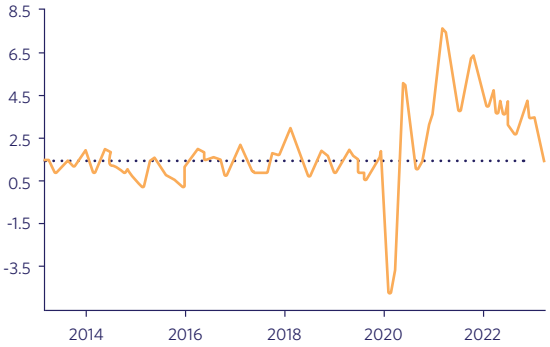
U.S. Consumption Price Deflator | Shelter
3 Mo. A.R. | Jul: 5.8% e



Source: Evercore ISI

CHART 4

U.S. Consumption Price Deflator Core | ex Shelter
3 Mo. % A.R. | Jul: 1.3% e



Source: Evercore ISI

MATT BENNITT
MATT@LYELLWEALTH.COM

JEFF BERRY
JEFF@LYELLWEALTH.COM

KEVIN CONNELL
KEVIN@LYELLWEALTH.COM

PERI SOYUGENC
PERI@LYELLWEALTH.COM

NANCY TUCK
NANCY@LYELLWEALTH.COM

JOANNA LEVASSEUR
JOANNA@LYELLWEALTH.COM

TODD SHIMADA
TODD@LYELLWEALTH.COM

ANNA WONG
ANNA@LYELLWEALTH.COM

KATHERINE HILL
KATHERINE@LYELLWEALTH.COM

LISA SANCHEZ
LISA@LYELLWEALTH.COM

FRANCESCA FAORO
FRANCESCA@LYELLWEALTH.COM

CHART 5

University of Michigan Confidence: 1-Year Inflation Expectations

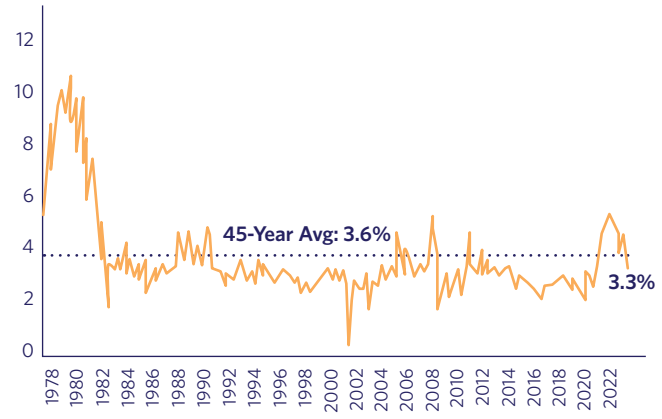
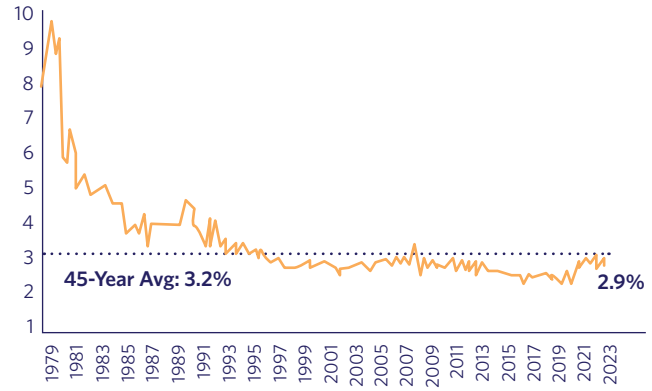


CHART 6

University of Michigan Confidence: 5-10 Year Inflation Expectations



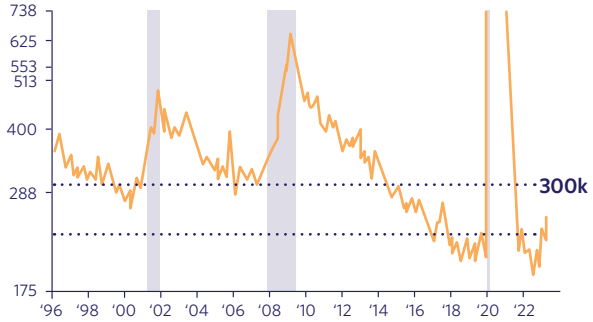
Source: Bespoke Investment Group, University of Michigan

The Fed worries that inflation expectations will become unanchored, meaning that investors' and consumers' behavior changes because they expect higher future prices. Fortunately, consumer 1-year inflation expectations have dropped considerably over the past year, and longer-term expectations remain below their long-term average (Charts 5 and 6).

CHART 7

U.S. Initial Unemployment Claims

4 Wk. Avg. | Aug 12: 234k



Source: Evercore ISI

The Fed's actions are impacting the economy. U.S. unemployment has increased, although historically initial claims need to hit 300,000 per week to reach recessionary levels (Chart 7). Temporary-help service employment is decreasing, which also reflects more labor market slack (Chart 8). Leading Economic Indicators have hooked down to a degree that would normally suggest a recession was at hand (Chart 9).

CHART 8

U.S. Payroll Employment | Temporary Help Svcs

Jul: 2972 | Thousands

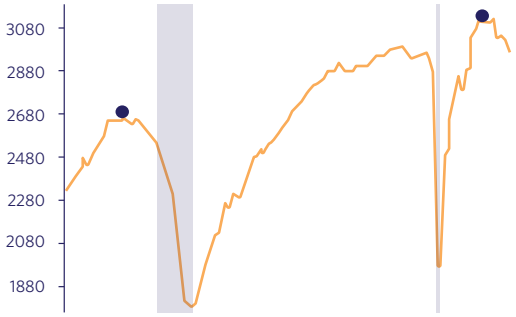
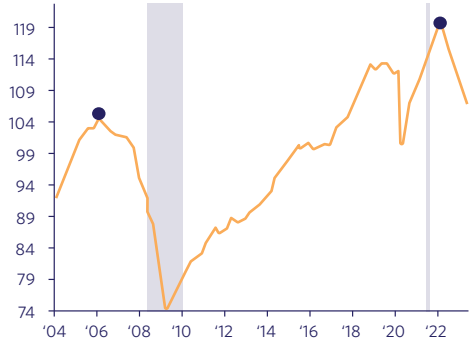


CHART 9

U.S. Leading Indicator | Jun: 106.1

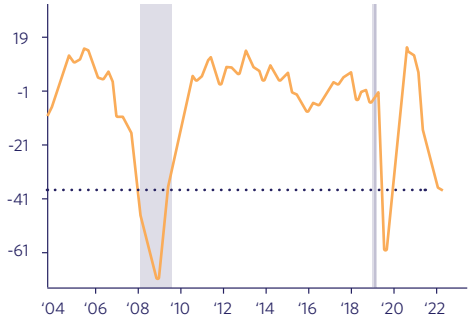


Source: Evercore ISI

U.S. banks' willingness to lend has plummeted as reflected by the Senior Loan Officer survey (Chart 10). Venture capital ("VC") funding has slowed significantly (Chart 11). Reduced bank lending and VC financing inevitably portend continued economic slowing, less new business formation, and lower employment.

CHART 10

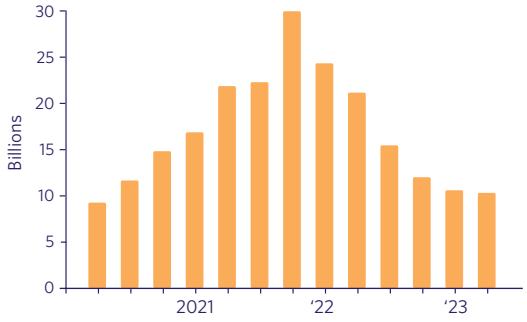
Senior Loan Officer Opinion Survey
Willingness To Make Loans
2023: 3Q: -38.6%



Source: Evercore ISI

CHART 11

U.S. Early Stage Venture Funding, Quarterly



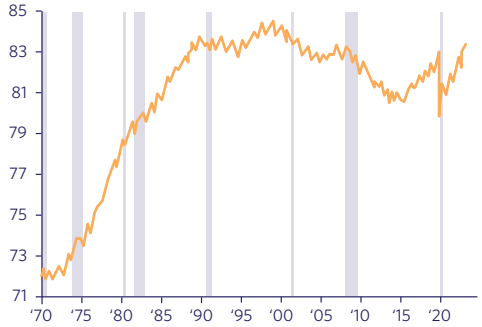
Source: Pitchbook, Wall St. Journal

The labor participation rate for "prime-age workers" has increased above pre-pandemic levels and beyond the Fed's expectations when it started tightening (Chart 12). This is a welcome development as, all things being equal, a larger workforce results in less wage pressure.

The Fed has viewed the combination of low unemployment and a high level of unfilled positions/job openings ('JOLTS") as a potential source of wage inflationary pressures. However, the JOLTS survey's reliability is increasingly questionable, as the percentage of respondents is much lower than other Bureau of Labor Statistics surveys and has plummeted to a ~30% rate (Chart 13).

CHART 12

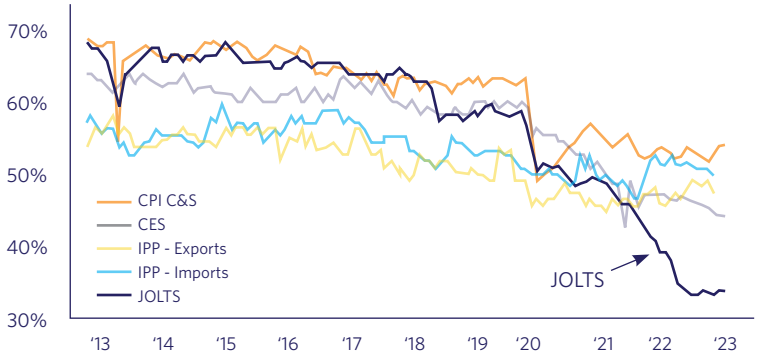
U.S. Participation Rate | Ages 25-54
Jun: 83.5%



Source: Evercore ISI

CHART 13

U.S. BLS Survey Response Rates



Source: Strategas Research Group, Bureau of Labor Statistics

CHART 14

Number of Workers on Strike By Month (Thousands)

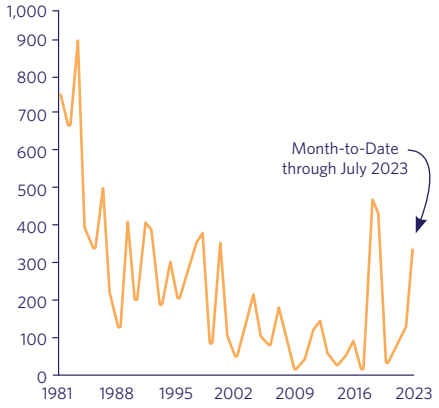
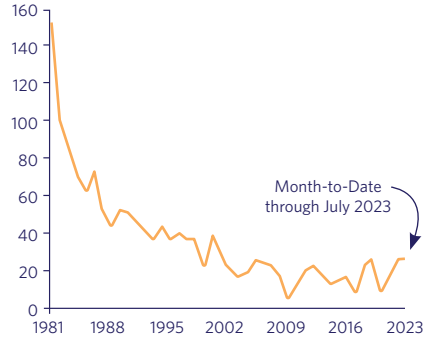


CHART 15

Major Work Stoppages in Effect (>1,000 Employees)

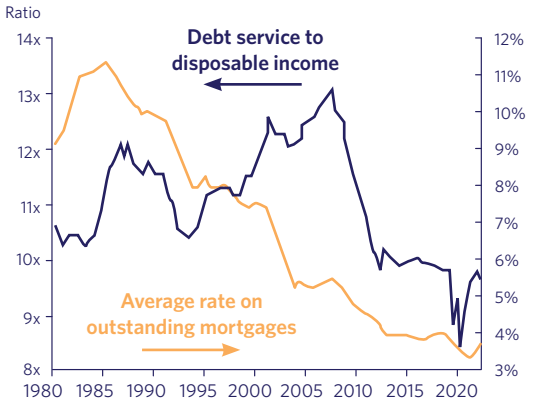


Source: Strategas Research Group, Bureau of Labor Statistics

Labor discontent as reflected by union strikes and work stoppages is receiving media attention. Organized labor's efforts to increase wages and benefits is worth monitoring as significant concessions by management could impact inflation over time (Charts 14 and 15).

CHART 16

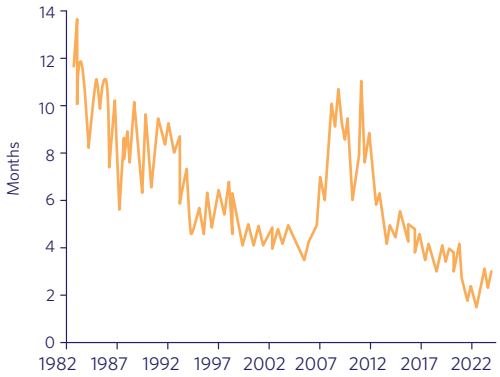
U.S. Household Debt



Source: Bloomberg, BEA, JP Morgan Asset Management

CHART 17

Month Supply of Existing Single Family Homes



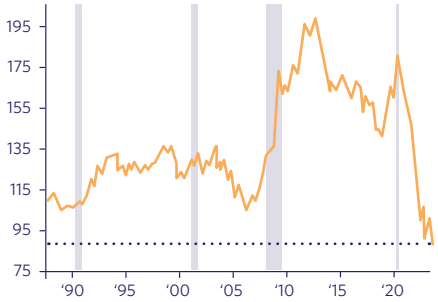
Source: National Association of Realtors, JP Morgan Asset Management

One reason for consumers' economic resilience in the face of higher rates is that the average rate on outstanding mortgages is still very low. Many homeowners refinanced in recent years and the average homeowner has a ~3.5% fixed rate mortgage. U.S. consumers' ratio of debt service to disposable income is still low (Chart 16). The locked-in low mortgage rate has resulted in existing homeowners staying put and less single-family home inventory for sale. This low inventory for sale is also supporting home prices versus what would be expected with mortgage rates over 7.0%. The supply of existing single-family homes is at historic lows (Chart 17).

The U.S. housing affordability index, which reflects housing prices, average incomes, and mortgage rates, is the worst in four decades. In California it is estimated that only 16% of households can currently afford the median-priced home, down from 56% in 2012 (Chart 18).

CHART 18

U.S. Housing Affordability Index
SA by EVRISI
Aug: 87.7 e



Source: Evercore ISI

CHART 19

Yield Curve Inversion Preceded All Recessions

Basis points, 10Y-3M yield spread, 30 day smoothing

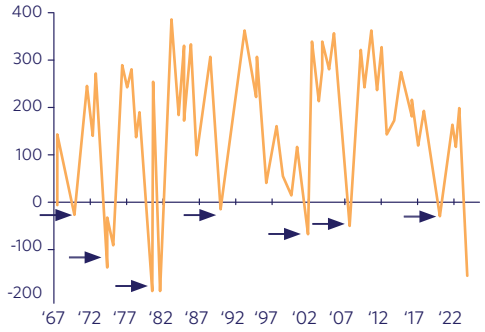
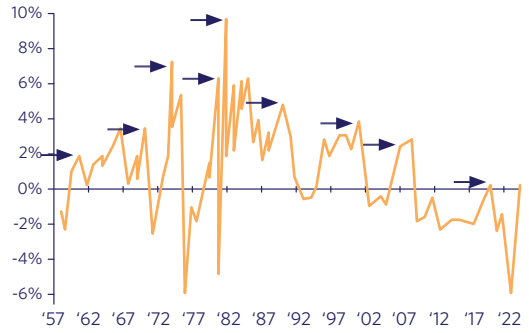


CHART 20

...But Were Caused By A Higher Real Cost of Money

Real interest rates (FED Funds - Core CPI), 21 day smoothing



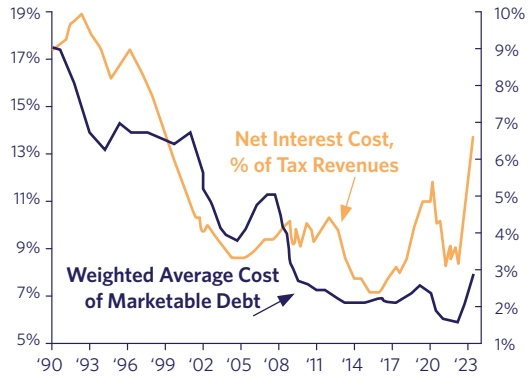
Source: Bloomberg, JP Morgan Asset Management

It has been frequently reported that a negatively sloped yield curve (an "inversion") has preceded all modern U.S. recessions (Chart 19). However, all prior episodes were caused by a higher REAL cost of money, meaning policy rates exceeded the inflation rate. The Fed increases have only recently reached the government's published inflation measure, suggesting financial conditions are only just now becoming restrictive (Chart 20).

While many homeowners and publicly traded companies took advantage of historically low interest rates by extending debt maturities and locking in long-term attractive borrowing rates, the US. Government did not. Neither the Trump nor Biden Administrations capitalized on the opportunity, and now federal borrowing costs are rapidly increasing. The weighted average cost of marketable U.S. government debt has more than doubled in the past year (Chart 21). It is worth noting that 3/4 of U.S. Treasuries mature within the next five years. Net interest costs will rapidly become a political issue as non-negotiable debt payments join other non-discretionary items to squeeze discretionary budget items.

CHART 21

Net Interest Cost & Weighted Average Cost of Marketable Debt



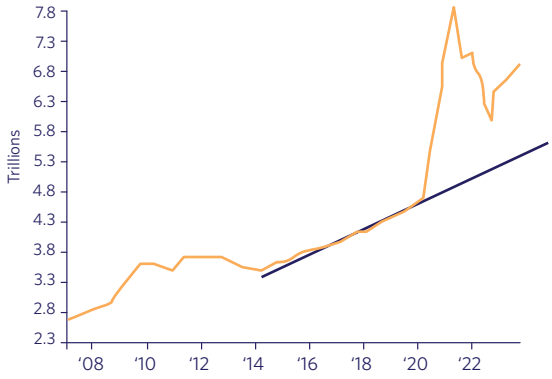
Source: Strategas Research Group

The federal government hasn't sobered up from its pandemic fiscal stimulus and continues to spend aggressively. The U.S. is currently spending $1.5 trillion per year above the pre-pandemic trend (Chart 22).

CHART 22

U.S. Federal Outlays

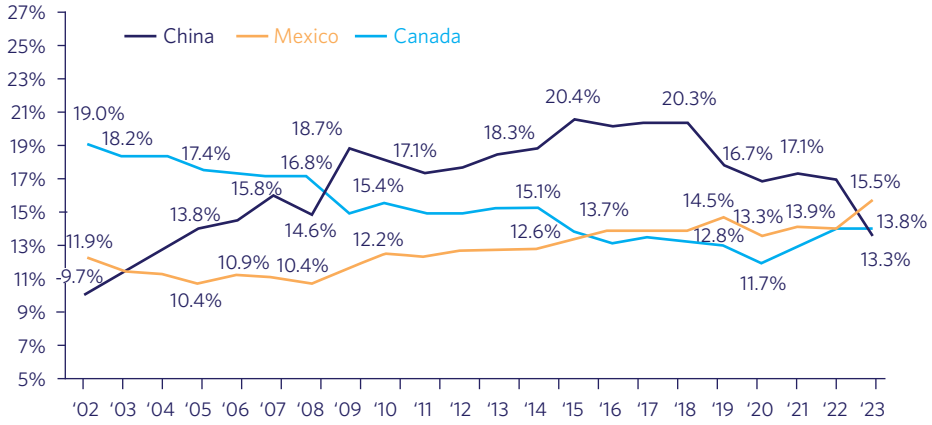
12 Mo. Sun | Jun: $6.73t



Source: Evercore ISI

CHART 23

U.S. Imports From China, Canada, & Mexico, % of Total Imports First 6 Months of Year (US Census)

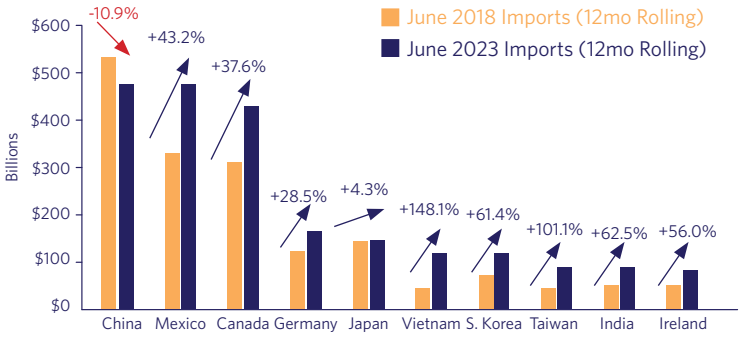


Source: Strategas Research Group

The American bi-partisan effort to reduce economic ties to China has been making progress. As a percentage of total imports, 2023's first half trade with China dropped by one-third from its historic peak. Canada and Mexico are beneficiaries of this trend (Chart 23). Over the past five years, virtually every U.S. trade partner is gaining share except China (Chart 24).

CHART 24

June 2023 Vs. 2018: U.S. Imports from Major Trading Partners 12Mo Rolling, $Bn (Census)

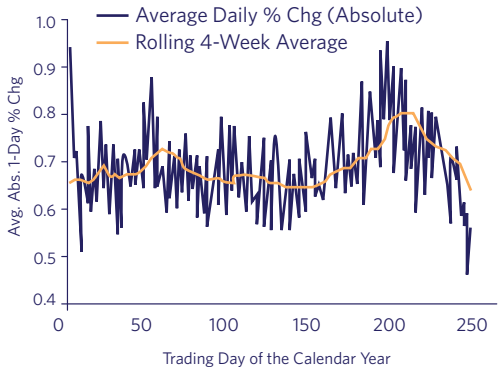


Source: Strategas Research Group

The U.S. stock market is typically more volatile in the fall than the rest of the year as daily price ranges increase during this period (Chart 25).

CHART 25

S&P 500 Average Daily Volatility (+/- % Chg) Throughout Calendar Year



Source: Bespoke Investment Group

CHART 26

S&P 500 First Quintile Cash Outlet Performance Share Repurchases Relative S&P 500 (Indexed to 100, 1/1/08)

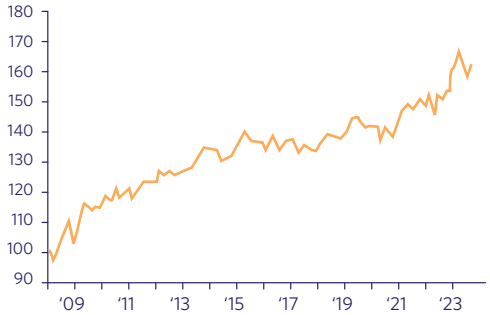
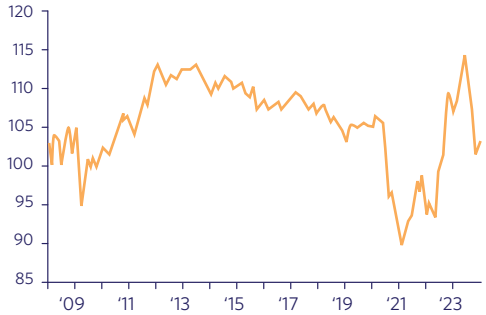


CHART 27

S&P 500 First Quintile Cash Outlet Performance Capital Expenditures Relative S&P 500 (Indexed to 100, 1/1/08)

CHART 28

S&P 500 First Quintile Cash Outlet Performance Dividends Relative S&P 500 (Indexed to 100, 1/1/08)



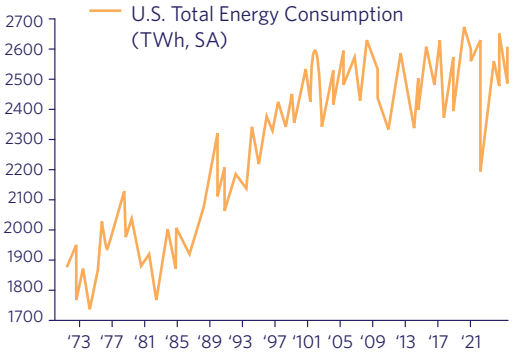
Source: Strategas Research Group

It is interesting to observe what type of corporate behaviors are rewarded by the stock market. Based on the past fifteen years of data, the market likes companies which repurchase stock, penalizes companies that disproportionately use their cash for capital expenditures, and is generally indifferent to companies that prioritize dividends (Charts 26, 27 and 28).

The United States' total energy consumption hasn't increased in 25 years (Chart 29). Solar and wind now generate over 5% of the U.S. energy (Chart 30).

CHART 29

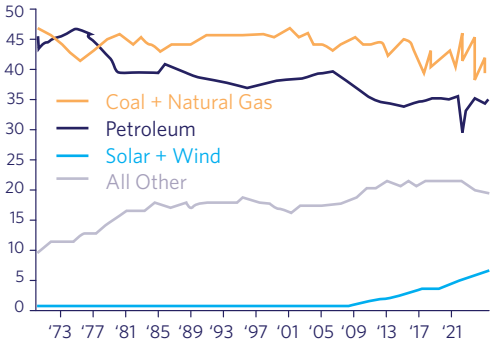
U.S. Total Energy Consumption Hasn't Grown in 25 Years



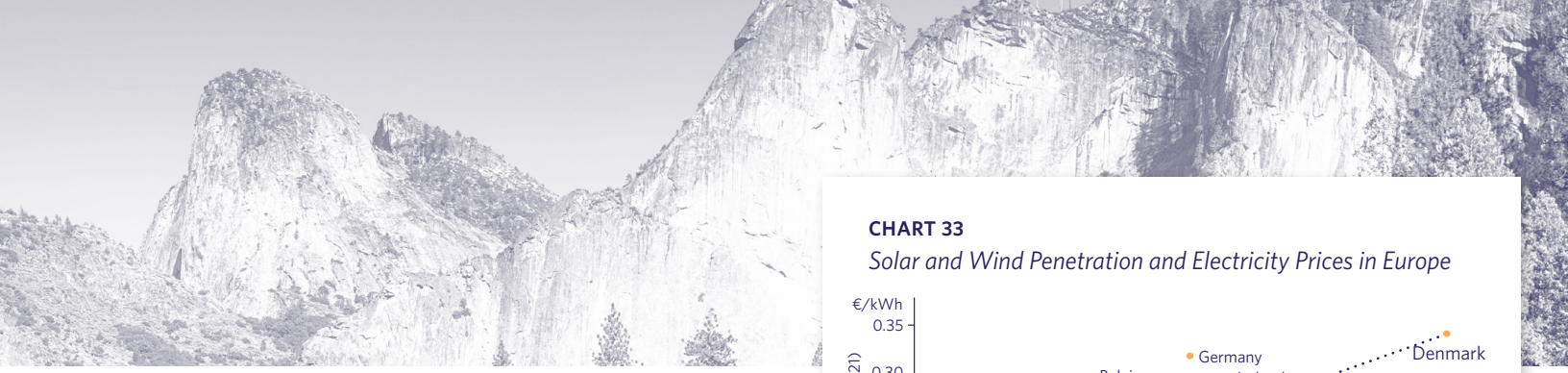
Source: Bespoke Investment Group

CHART 30

Solar and Wind are Over 5% Market Share



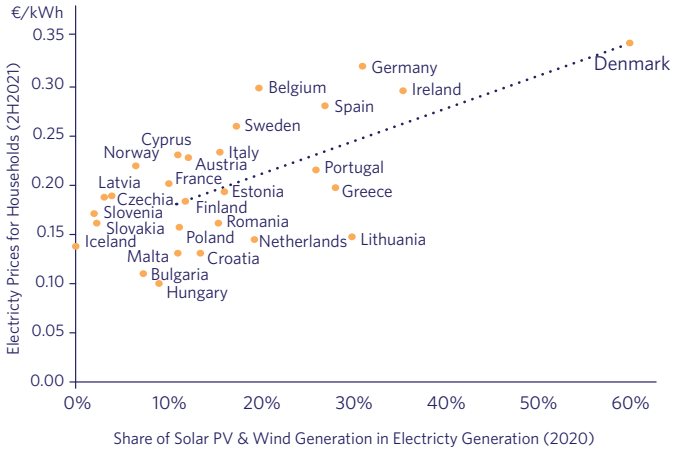
Source: Bespoke Investment Group



The world is woefully short many of the minerals needed to meet the IEA's Sustainable Development Scenario (Chart 31). Reliable sources for mineral extraction and processing must be developed, as the current market share requires dependencies on unreliable countries (Chart 32). The cleaner energy future will likely be more expensive as indicated by the correlation seen in Europe between solar and wind's market share and electricity prices (Chart 33).

CHART 33

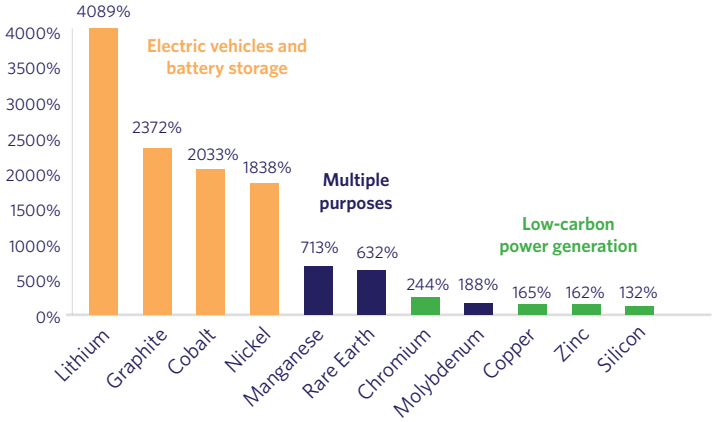
Solar and Wind Penetration and Electricity Prices in Europe



Source: Energy Policy Research, Eurostar, IEA

CHART 31

Required Growth of Critical Mineral Supply (IEA's Sustainable Development Scenario, 2020-2040)

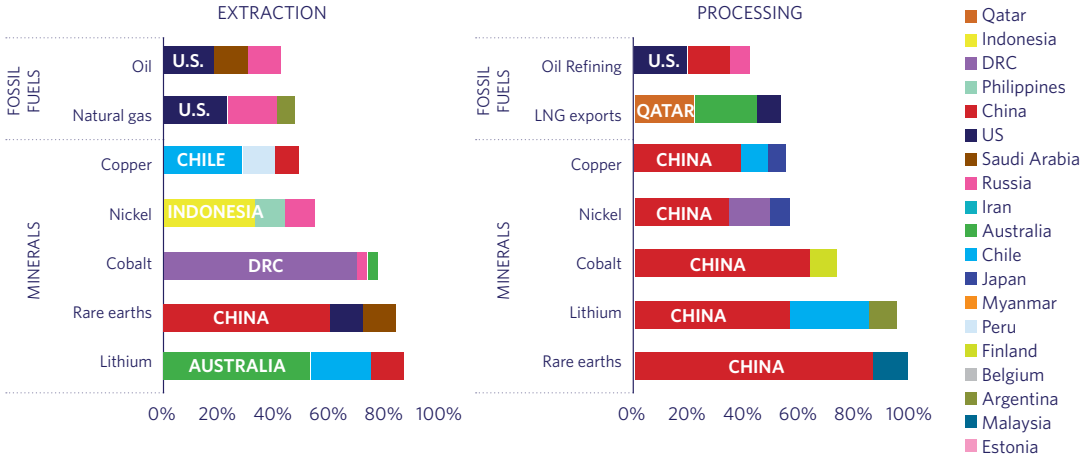


Source: Energy Policy Research, IEA, *The Role of Critical Minerals in Clean Energy Transitions*

As indicated in this Perspective, the global central banks have made progress in tightening financial conditions and reducing inflation. The U.S. economy has remained relatively resilient in the face of these headwinds to date, although Europe is teetering on recession and China is experiencing a serious downturn. Monetary policy operates with a lag, and the markets are weighing whether the Fed can engineer a "soft landing" by lowering inflation to its 2% target without incurring a recession. U.S. interest rates have been rising following their plunge after Silicon Valley Bank's failure in March 2023, and yields are at post-Global Financial Crisis ("GFC") highs. The market is uncertain if these higher rates are sustainable, and whether they portend a different economic regime from the post-GFC era.

CHART 32

Share of Top Three Producing Countries in Production of Selected Minerals and Fossil Fuels, 2019



Source: IEA, *The Role of Critical Minerals in Clean Energy Transitions*

Nvidia's historic earnings report in May 2023 ushered in a market rally amongst many technology stocks as it showed that Artificial Intelligence ("AI") will impact near-term financial results for well-positioned companies. Although there is certainly a lot of hype, it appears that AI has transformative implications and will likely boost productivity across industries. Lyell Wealth Management is alert to the potential for a paradigm shift that erodes the competitive moats from today's leading technology companies. However, Lyell's current assessment is that, rather than a competitive paradigm shift, AI appears to be more of a "sustaining" technology since the market leaders have the capital budgets, large datasets, and engineering depth to capitalize on the opportunity. Microsoft, Amazon, Google, et al appear ready to capture much of the economic value from this breakthrough advancement. This doesn't mean that some successful startups won't emerge, but the rich may just get richer.

Lyell Wealth Management views market timing as a losing investment strategy, as well illustrated by 2023's first half; there were many good reasons for the market to decline and yet it provided strong returns. However, Lyell also views asset allocation as critical to ensure appropriate risk-reward balance and liquidity. People are not machines, and market drops are emotionally difficult. We want each client to be able to maintain their investment strategy during the most painful turmoil. Today's higher yields make diversification more palatable than in recent years, and Lyell has been adding investment-grade, short- and intermediate-term fixed income to client portfolios.

3000 SAND HILL ROAD
BLDG 1 - SUITE 135
MENLO PARK, CA 94025
(650) 353-3692
LYELLWEALTH.COM
INFO@LYELLWEALTH.COM