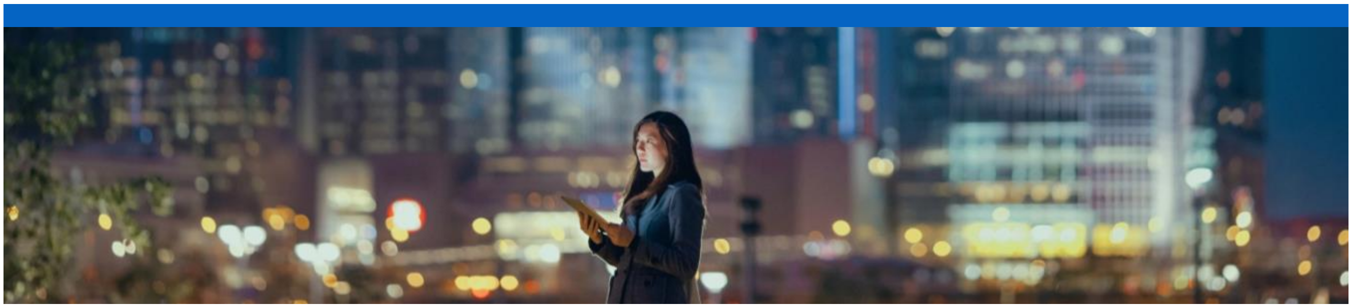

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CIO Strategy Bulletin

Understanding Markets and Inflation

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SUMMARY

- The sharpest "about face" in Fed policy in modern history has propelled a record large *combined* drop in equities and fixed income, with both US stocks (as measured by the S&P 500) and long-term US Treasuries falling more than 10% in the last six months for the first time ever. The forward returns for the 10-year US Treasury note were higher after *all* five periods when both stocks and bonds fell together. The returns for US equities were higher in only three of the five. *This is why we believe "Bonds are Back."*
- With the economy facing supply shortages, a recession will not bring the war in Ukraine to a more rapid conclusion, nor the end of the pandemic. We fear that the Fed's medicine, applied too quickly, may engender a hard landing for the economy, while not lowering inflation that quickly.
- With corporate profitability far above trend - EPS gained 47% last year - profits are vulnerable to retrenchment. A drop in profits in 2023 has become more likely. This fear of a decline in corporate profits is one factor driving the sharp decline in equities. This is why we are not inclined to relax our defensive bias in equity markets now. We are overweight essentials such as pharmaceuticals and cyber-security providers.
- We also believe that growth equities in essential, durable demand areas will eventually feel relief from valuation pressures as government bond yields peak. Innovation is continuous while markets have notable periods of euphoria and panic.
- Though the Fed cannot control the speed that inflation will fall, the Fed will determine the rate at which the economy will slow. While we are hopeful they will use forward looking analysis to determine their interventions, markets are watching closely to see if the fight against inflation is going to be harsh or more thoughtfully engineered.

REQUIEM FOR THE IPOD: NASDAQ THEN AND NOW

The iPod was first released in October 2001, a time when the Nasdaq was in the grips of a vicious bear market that saw it decline 78% over two years. The iPod was the product that made Apple a smashingly successful turnaround story and one of the most profitable and successful companies in history. Last week, Apple Inc. decided to discontinue production of its last generation iPod.

Of course, Apple shares didn't follow the Nasdaq[1]. But twice during the past three decades, Apple's share price fell more than 80%. In its recovery, the ecosystem of Apple suppliers helped the Nasdaq return more than 1,000% in the two decades that followed the "tech wreck" period (see **figure 1**).

In short, innovation is continuous while markets have notable periods of euphoria and panic.

Growth Shares Are Under Stress

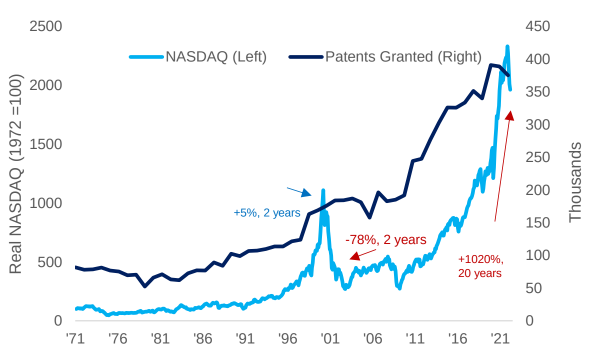
Two weeks ago, we noted that some of the tech firms that provided the strongest solutions to the problems of COVID in 2020 were now seeing a fundamental slowdown (please see As Fares Amazon, So Fares the Economy). At the same time their businesses are slowing, interest rates are rising.

For growth shares in particular, slower growth and higher rates drive valuations lower. This is acute for "long-duration assets" where future cash flow and profitability are in the more distant future (i.e., the value of profits made far in the future must be weighed against the immediate income an investor could earn at higher interest rates (see **figure 2**).

But What if Rates Stop Rising?

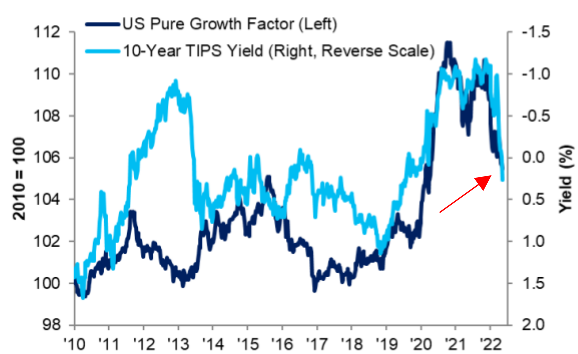
But what if market interest rates stop rising? Then at least one asset class – high quality fixed income – won't be suffering losses. This provides one pre-condition for a stabilization of large parts of the equity market.

Figure 1: Nasdaq Composite vs US patent grants



Source: Haver Analytics as of April 30, 2022. Past performance is no guarantee of future returns. Real results may vary. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. Past performance is no guarantee of future returns. Real results may vary.

Figure 2: US growth stock index vs real 10-year note yield (Inflation Protected Security)



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[1] For illustrative purposes only. This should not be construed as an offer of, recommendation of companies discussed.

STOCKS AND BONDS RARELY FALL TOGETHER

The sharpest "about face" in Fed policy in modern history has propelled a record large *combined* drop in equities and fixed income, with both US stocks and long-term US Treasuries falling more than 10% in the last six months **for the first time ever** (see **figure 5**). In fact, there are only five previous periods in the past 60 years when both asset classes have lost more than 4% during the same time over half-year periods.

Following joint declines in both US stocks and bonds, returns were solidly higher for both in the six months that followed on average. The five periods since the 1960s show 5.5% average gains for US equities and 10.9% for 10-year US Treasuries. But there's more.

THIS IS WHY BONDS ARE BACK

The forward returns for the 10-year US Treasury note were higher after *all* five periods when both stocks and bonds fell together. The returns for US equities were higher in only three of the five.

What delineates these five periods is the path of corporate earnings. During periods when earnings were about to decline significantly, equities severely underperformed bonds (see **figure 3**). Meanwhile, the unusually high inflation rates during some of these periods never hampered the bond market from rebounding.

Figure 3: Periods when 10-year U.S. Treasury bond and S&P 500 losses were both above 4.5%

Periods When 10-Year U.S. Treasury Bond and S&P 500 Losses Were Both Above 4.5%					
Six-Month Period		Six-Month Returns During (%)		Six-Month Returns After (%)	
Start	End	S&P 500	10-Year U.S. Treasury	S&P 500	10-Year U.S. Treasury
03/31/1969	09/30/1969	-8.3	-5.2	-3.7	6.8
09/30/1979	03/31/1980	-6.6	-12.9	22.9	10.0
03/31/1981	09/30/1981	-14.6	-7.0	-3.6	16.4
11/30/1983	05/31/1984	-9.5	-6.5	8.7	21.0
12/31/1993	06/30/1994	-4.8	-7.5	3.4	0.2
10/31/2021	04/30/2022	-10.3	-10.5	?	?
	Average:	**-9.0**	**-8.3**	**5.5**	**10.9**

Periods When 10-Year U.S. Treasury Bond and S&P 500 Losses Were Both Above 4.5%				
Six-Month Period		10-Year U.S. Treasry Year (At the Start of the Period)		S&P EPS Gain/Loss %
Start	End	Nominal	Real (Less CPI)	12-Months later (end date)
03/31/1969	09/30/1969	6.3	1.1	-9.0
09/30/1979	03/31/1980	9.4	-2.8	-4.6
03/31/1981	09/30/1981	13.1	2.6	-11.2
11/30/1983	05/31/1984	11.6	8.3	-0.9
12/31/1993	06/30/1994	5.8	3.1	22.8
10/31/2021	04/30/2022	1.6	-4.7	?
	Average:	**9.3**	**2.5**	**-0.6**

Source: Haver Analytics and Bloomberg as of April 30, 2022. Past performance is no guarantee of future returns. Real results may vary. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. Past performance is no guarantee of future returns.

INFLATION VIGILANTES

Inflation would abate if producers could satisfy demand with larger increases in supply. Consumers would not feel compelled to buy essential goods and services while forgoing other purchases. This is why the Fed is so focused on inflation, because consumers recoil under it, and occasionally exacerbate inflation in a self-reinforcing pattern. Inflation actually makes the risk of recession greater (see "Three Scenarios for the Economy and Markets").

Yet, the medicine the Fed wants to apply – ever higher rates – may have painfully little impact on inflation. At the moment, the Fed's patience is short. Despite the Fed's acknowledgement of the same exogenous shocks we have written extensively about (see "Fear and the Fed"), the speed at which the economy is rebalancing demand and supply is not bringing down inflation fast enough for the Fed.

Last week, the US CPI report for April showed less deceleration than expected, with headline and core measures gaining 8.3% and 6.2%, barely better than the 8.5% and 6.5% readings of March. Some components of new or existing demand (such as airfares and new cars) saw accelerating prices. The data may still be consistent with a March inflation peak, but the hope for a more rapid decline in inflation was dashed.

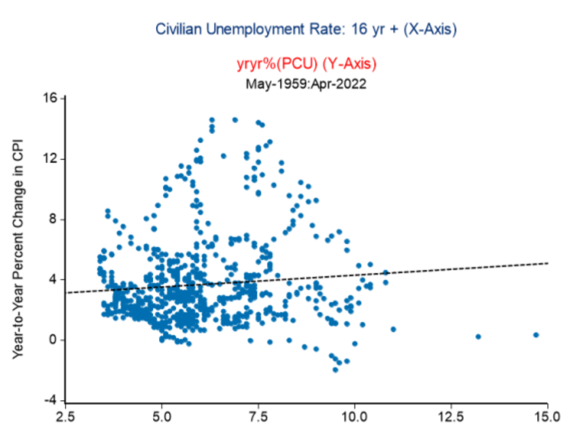
Will the Fed Be Effective?

Fiscal policymakers went too far in 2021, continuing stimulus for a second year even as the economy recovered with the Fed easing throughout. Yet this has stopped. With the economy facing supply shortages, a recession will not bring the war in Ukraine to a more rapid conclusion, nor the end of the pandemic

A recession causes higher unemployment, yet the relationship between unemployment and prices is so weak that only a huge sacrifice of employment could stabilize consumer prices quickly under present conditions (**figure 4**). Thus, we fear that the Fed's medicine, applied too quickly, may engender a hard landing for the economy, while not lowering inflation that quickly.

While equity and bond investors have doubted the Fed's potency, the asset class *not* doubting the Fed is the US dollar, which has surged to a 20-year high while gold has seen its value tread water (see **figure 5**). This is the opposite scenario one would expect if US inflation policy was considered irresponsible by global investors leading to capital flight.

Figure 4: Philips Curve 1959-2022: Relationship between unemployment and inflation



Source: Haver Analytics as of April 30, 2022.

Figure 5: Gold vs DXY Index

Source: Bloomberg as of May 12, 2022. Past performance is no guarantee of future returns. Real results may vary. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. Past performance is no guarantee of future returns. Real results may vary.

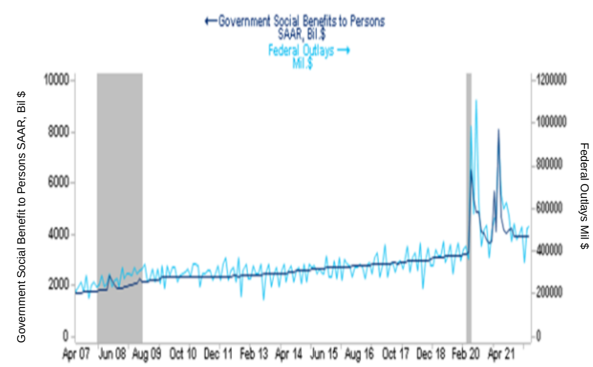
CAN COMPANIES SUSTAIN EARNINGS AFTER THE “FREE MONEY” ENDS?

We have repeatedly noted that COVID cash - providing consumers with income but not with work - would be both inflationary and highly profitable for firms (see **figures 6-7**). Income subsidies – financed with newly printed money -- generates excess demand without supply. But now that both fiscal and monetary easing have ended, the corporate sector needs to find growth on its own.

With corporate profitability far above trend - EPS gained 47% last year - profits are vulnerable to retrenchment. With higher 1Q EPS in hand and leading indicators softening, corporate profits are unlikely to fall in 2022. However, a drop in profits in 2023 has become more likely (see **figure 8**).

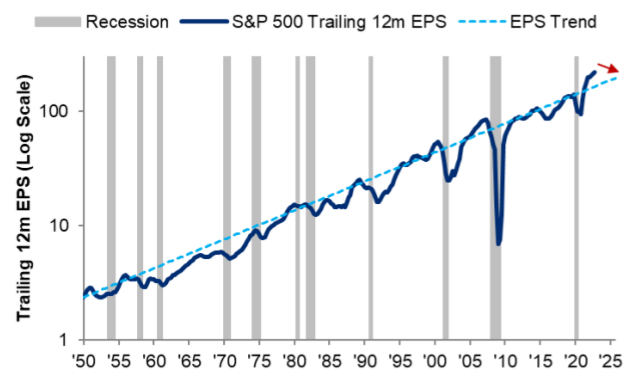
This fear of a decline in corporate profits is one factor driving the sharp decline in equities. Extreme bearishness is typically a contrarian indicator (witness the huge bear rally in growth shares on Friday). But we are not inclined to relax our defensive bias in equity markets now. We expect continued shortages of both commodities and labor for the remainder of 2022, and thus we want portfolios to reflect what consumers are buying. Increasingly, “wants” will be given up for “needs” (see **figures 9-10**).

Figure 6: Federal spending



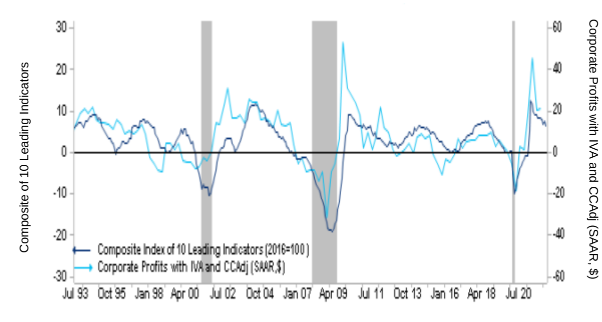
Source: Haver Analytics, Bureau of Economic Analysis, and US Treasury as of April 30, 2022. Grey shaded areas note recession.

Figure 7: Corporate EPS and trend



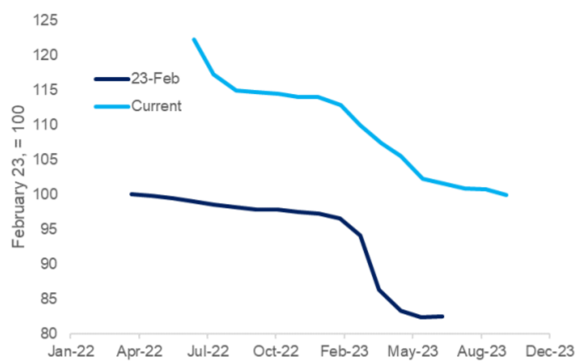
Source: Haver Analytics as of April 30, 2022.

Figure 8: US corporate profits Y/Y% vs index of leading economic indicators



Source: Haver Analytics, Conference Board and Bureau of Economic Analysis as of April 30, 2022. Grey shaded areas note recession.

Figure 9: Commodity futures basket pre- and post-Ukraine invasion



Source: Bloomberg as of May 12, 2022. Note: Brent, Wheat, German Natural Gas and Steel Futures basket is comprised of futures contracts with delivery through 2024, are equal weighted and indexed to Feb 2023; the day before start of war set to 100 for each asset.

Figure 10: Durable vs discretionary demand within S&P 500 Index

Source: Haver Analytics as of April 30, 2022. Past performance is no guarantee of future returns. Real results may vary. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. Past performance is no guarantee of future returns. Real results may vary.

ADD MORE BONDS, MAINTAIN HIGHER QUALITY EQUITIES

In our RESILIENT and RECESSION scenarios, we expect slower economic growth. If the Fed hits the right combination of higher rates and QT, it can induce a slowdown without a recession. If the Fed errs or deliberately crushes the economy to fight inflation, a recession is likely to ensue. But one way or the other, corporate profits could be lost in the process.

Given the rapid rise in rates and the fiscal tightening underway, the data to support a peak in bond market yields is greater than the data suggesting that a stock market bottom is at hand. After the largest drawdown in history, we believe long-term US government bonds are asymmetrically priced with valuations bottoming this year in 70% of our scenarios (see **figure 11** and our CIO Bulletin, "A Brighter Future for Fixed Income?").

While we wish we had more optimism to share with Nasdaq enthusiasts in the near term, we think certain defensive assets are more likely to find stability first.

Figure 11: US Long-Term Treasury Total Return Index

Source: Bloomberg as of May 12, 2022. Past performance is no guarantee of future returns. Real results may vary. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. Past performance is no guarantee of future returns. Real results may vary.

CONCLUSION

Given global supply chain issues, the complex realignment of the West's economic relationship with Russia and the rolling impacts of COVID, a "fast fix" for inflation is not in the cards. Nonetheless, if you believe, as we do, that fiscal and monetary tightening will slow the economy and set the stage for decelerating inflation, then a peak in market interest rates is likely in the next 2-6 months.

To be crystal clear, we are not speaking about interest rates paid by weaker credits. We are specifically highlighting US government bonds, higher quality investment-grade corporates, and municipal debt. With US government bond yields reaching 3% during a period of increased macroeconomic risks, we have added overweights in portfolios to long-duration Treasuries for the first time since rates bottomed in 2020.

While we do not believe recession is inevitable, recession risks are unusually high at this moment. We think corporate earnings will remain pressured from 2022 and into 2023, making equities vulnerable for a longer period than in more typical cycles. That's why we have a strong preference for defensive and high-quality shares. We have recommended consistent dividend growers that have high quality balance sheets. We are overweight essentials such as pharmaceuticals and cyber-security providers. We also believe that growth equities in essential, durable demand areas will eventually feel relief from valuation pressures as government bond yields peak.

Though the Fed cannot control the speed that inflation will fall, the Fed will determine the rate at which the economy will slow. While we hope they will use forward-looking analysis to determine their interventions, markets are watching closely to see if the fight against inflation is going to be harsh or more thoughtfully engineered.

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