Grimes Investment Quarterly | 09/30/22

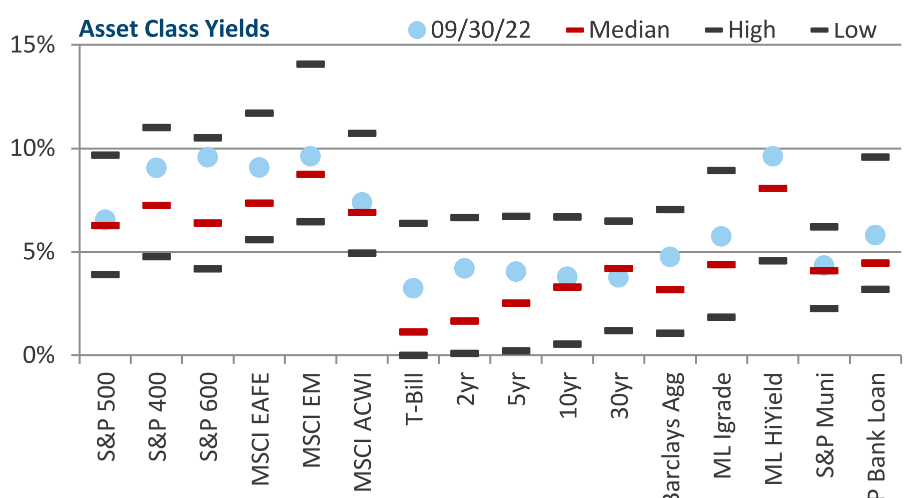
Major Asset Class Returns

Index	Q3'22	2022 ytd	2021
S&P 500	-5%	-24%	29%
S&P Mid Cap 400	-2%	-22%	25%
Russell 2000	-2%	-25%	15%
MSCI EAFE	-9%	-27%	12%
MSCI Emerging Markets	-11%	-27%	-2%
MSCI All Country World	-7%	-25%	19%
T-Bill	0%	1%	0%
7-10yr Tsy	-6%	-16%	-3%
Barclays Aggregate	-5%	-15%	-2%
ML Investment Grade	-5%	-18%	-1%
ML High Yield	-1%	-15%	5%
S&P Muni	-3%	-12%	2%
S&P Bank Loan	1%	-4%	4%

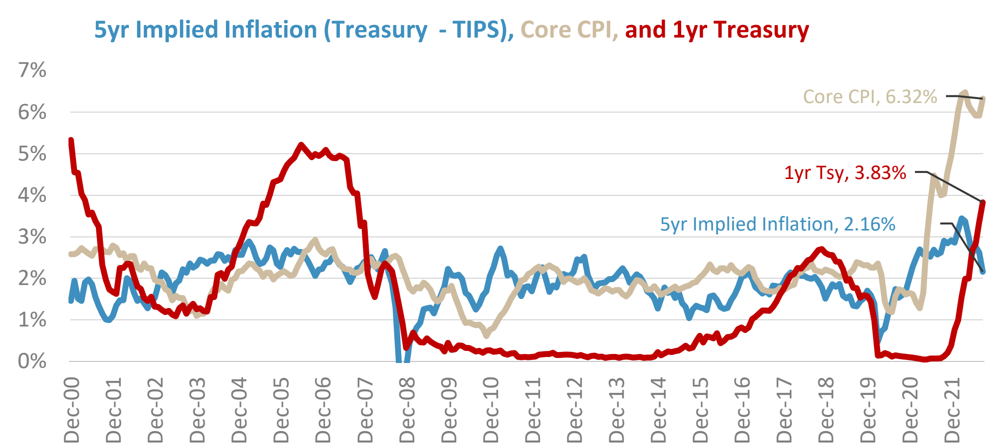
Overview: Most major asset classes continued to decline in Q3'22, despite a rally in July to start the quarter. The S&P 500 fell 5%, for a 24% ytd decline. The Russell 2000 (-2% Q3, -25% ytd), MSCI EAFE (-9% Q3, -27% ytd) and MSCI EM (-11% Q3, -27% ytd) followed suit, leaving the MSCI ACWI (-7% Q3, -25% ytd) lower. For Fixed Income, rising interest rates (the 10yr yield rose from 3.80%, versus 2.98% on 6/30/22 and 1.51% on 12/31/21) drove negative returns in the Bloomberg/Barclays Aggregate (-5% Q3, -15% ytd), 7-10yr Treasury (-6% Q3, -16% ytd), ML Igrade (-5% Q3, -18% ytd), S&P Muni (-3% Q3, -12% ytd) and ML High Yield (-1% Q3, -15% ytd). Only the low duration S&P Bank Loan Index (+1% Q3, -4% ytd) and T-Bill (0% Q2, +1% ytd) were higher during Q3.

Asset Class Yields Have Moved Above Averages: Asset class yields (earnings yield for equities, yield to maturity for fixed income) for equities are all above average. Thanks to the recent rise in interest rates, bond yields across the curve and credit quality have now moved above their averages, too.

Inflation Expectations Fall as Fed Expectations Rise: The Fed's accelerating rate hike timetable in response to the persistence of inflation has been the major market driver in 2022. The chart below shows Core CPI, implied inflation (from TIPS), and the 1 year Treasury yield (as a proxy for Fed policy). Core CPI initially jumped on factors that the Fed defined as transitory and the market, as shown by TIPS implied inflation, agreed. However, when implied inflation broke over 3% in April (as oil spiked due to Russia's invasion of Ukraine), the Fed accelerated its pace of interest rate hikes. Three straight 75 bps increases on 6/15, 7/27, and 9/21 caused the surge in the 1yr Treasury yield. Yet as CPI and the 1yr have risen, implied inflation expectations have dropped. While high inflation data is garnering headlines, the markets are quickly pricing the expectation that the Fed's rate hikes will bring inflation down. The question is how much the economy will be impacted by this rapid shift.



Equity earnings yield (earnings/price) | Fixed Income yield to maturity



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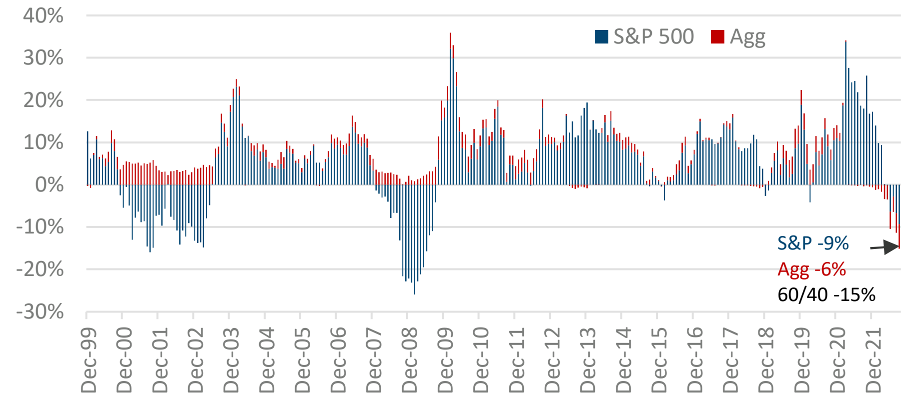
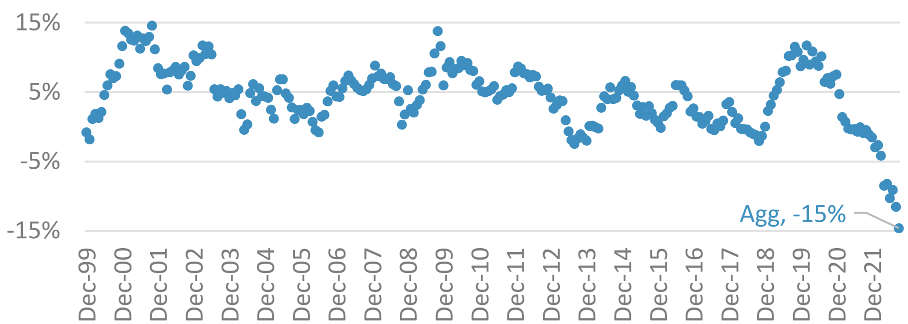
60/40 Portfolio Rolling 12 month Return & Attribution



Barclays Aggregate 12 month Rolling Returns



	Ytd Return	Ytd PE Ch	Q3'22 PE	Q4'21 PE	Avg PE
S&P 500	-23.9%	-28.9%	15.3	21.5	16.0
S&P Growth	-30.4%	-32.1%	19.0	27.9	18.4
S&P Value	-16.6%	-23.0%	13.0	16.9	13.2

	Ytd Return	Ytd Yield Ch	Q3'22 Yield	Q4'21 Yield	
Agg	-14.6%	2.99%	4.75%	1.76%	
ML Igrade	-18.3%	3.34%	5.74%	2.40%	
ML HiYield	-14.6%	4.70%	9.61%	4.90%	

Balanced Portfolios Fall: On a year to date basis, the typical 60/40 balanced portfolio (60% stocks, 40% bonds) is down 20%. The chart to the left shows the rolling 12 month returns for 60/40, using S&P 500 and Barclays Aggregate total returns, as well as the contribution of stocks (S&P 500, in blue) and bonds (Barclays Aggregate, in red). For the period ending 9/30/22, trailing 12 month returns were -15%. Periods when returns were -10% or lower are infrequent, with only two groupings since 1999, concentrated in the 2001 dotcom crash and the 2008-2009 Global Financial Crisis (GFC). In other words, performance this poor for 60/40 is unusual.

The 2022 case, however, is unique. In 2001 and 2008, the Agg contribution was positive, shown by the positive red bars during those periods. This illustrates the diversification benefit of bonds delivering a positive return while stocks were declining. In 2022, the poor 60/40 performance is the result of both stocks and bonds declining, with both detracting from performance due to the impact of rising rates on both equity and fixed income prices.

This is evident in the next chart, showing just the rolling returns for the Barclays Agg. The current 15% decline is the only time since 1999 they have been below -5%, let alone -10%. Because of the extraordinarily bad bond performance, the "typical balanced investor" is experiencing one of the three worst investment periods of the past twenty years.

Lower PEs Will Matter when Markets are Confident in Earnings: Declining equity prices have been driven by compressed PE multiples. The S&P, for example, has declined 24% ytd, with the 29% decline in its PE multiple accounting for all of this (and more). This is more pronounced in the S&P Growth Index, where a 30% decline is due to a 32% decline in the PE multiple. And even S&P Value, which has held up better with a 17% decline, has seen its multiple fall by 23%. The positive is that the S&P 500 and its two component indices have declined to their 20 year average multiples. And as the Growth / Value disparity shows, a large amount of the multiple compression in the S&P 500 came in the higher PE Growth stocks. It's also a positive that since the PE multiple is falling more than the price, this means earnings are still rising. The question the markets are now weighing, is what would be the implication of a recession causing a decline in earnings? Lower valuations provide a cushion for bad news on the earnings front, but there is uncertainty on the depth.

Higher Yields can Spur Investor Interest: For Fixed Income, prices move in the opposite direction of interest rates. The focus in 2022 has mostly been on how rising rates have caused prices to fall. The corollary, though, is that lower prices have created higher yields. The table to the left shows the year to date returns on the Barclays Aggregate, Merrill Lynch Investment Grade, and Merrill Lynch HiYield indices. It also shows the yields at the start of the year, the end of Q3, and the change. For all three, the yield has more than doubled, meaning investors are now better compensated for inflation and recession risks. The question is if it is enough, and markets will be volatile until the extent of the downturn is known.

Equity Markets Summary

Headline Indices	Q3'22	2022	2021	Fwd PE*	Avg PE**	+/- avg
Dow	-6.2%	-19.7%	20.9%			
Nasdaq	-3.9%	-32.0%	22.2%			
Russell 2000	-2.2%	-25.1%	14.8%			
Asset Classes	**Q3'22**	**2022**	**2021**	**Fwd PE***	**Avg PE****	**+/- avg**
S&P 500	-4.9%	-23.9%	28.7%	15.3	16.0	-4%
S&P Mid Cap 400	-2.5%	-21.5%	24.8%	11.0	13.8	-20%
S&P Small Cap 600	-5.2%	-23.2%	26.8%	10.4	15.6	-33%
MSCI EAFE	-9.3%	-26.8%	11.8%	11.0	13.6	-19%
MSCI Emerging Markets	-11.4%	-26.9%	-2.2%	10.4	11.4	-9%
MSCI AC World	-6.7%	-25.3%	19.0%	13.5	14.5	-6%
S&P 500 Sectors	**Q3'22**	**2022**	**2021**	**Fwd PE***	**Avg PE****	**+/- avg**
Consumer Discretionary	4.4%	-29.9%	24.4%	24.1	17.8	35%
Consumer Staples	-6.6%	-11.8%	18.6%	18.7	17.9	4%
Energy	2.3%	34.9%	54.6%	7.9	13.7	-42%
Financials	-3.1%	-21.2%	35.0%	10.6	12.4	-15%
Healthcare	-5.2%	-13.1%	26.1%	15.1	16.1	-6%
Industrials	-4.7%	-20.7%	21.1%	15.3	16.0	-4%
Technology	-6.2%	-31.4%	34.5%	18.5	17.8	4%
Materials	-7.1%	-23.7%	27.3%	12.4	15.3	-19%
Communication Services	-12.7%	-39.0%	21.6%	13.7	18.0	-24%
Utilities	-6.0%	-6.5%	17.7%	17.8	14.6	22%
Growth vs Value	**Q3'22**	**2022**	**2021**	**Fwd PE***	**Avg PE****	**+/- avg**
S&P Growth	-3.9%	-30.4%	32.0%	19.0	18.4	3%
S&P Value	-5.8%	-16.6%	24.9%	13.0	13.2	-2%
International	**Q3'22**	**2022**	**2021**	**Fwd PE***	**Avg PE****	**+/- avg**
Eurozone	-10.5%	-32.6%	14.3%	10.2	12.5	-19%
Germany (DAX)	-5.2%	-23.7%	15.8%	9.8	12.9	-24%
UK (FTSE)	-3.8%	-6.6%	14.3%			
Japan (Nikkei)	-0.8%	-8.1%	6.7%			
MSCI Asia Pac xJapan	-12.6%	-26.2%	-2.7%	12.8	14.5	-12%
S. Korea (KOSPI)	-7.6%	-27.6%	3.6%	15.6	19.4	-20%
India (Sensex)	8.6%	-0.3%	23.2%			
China (Shenzhen)	-14.0%	-24.5%	8.6%	9.2	9.9	-7%
S&P Latin America 40	5.5%	6.1%	-12.7%	6.4	11.4	-43%
Brazil (Bovespa)	11.7%	5.0%	-11.9%	6.9	10.5	-34%
Mexico	-5.6%	-14.3%	24.4%	12.3	14.4	-15%

Asset Classes: For Q3'22, equities declined across the board. The S&P 500 (-4.9% Q3, -23.9% ytd), the Russell 2000 (-2.2% Q3, -25.1% ytd), the MSCI EAFE (-9.3% Q3, -26.8% ytd) and the MSCI EM (-11.4% Q3, -26.9% ytd) are all within a few percentage points of one another. With these similar returns combined, the global MSCI ACWI (-6.7% Q3, -25.3% ytd) was in the same range.

The tech-driven NASDAQ (-3.9% Q3, -32.0% ytd) outperformed the more traditional Dow Jones (-6.2% Q3, -19.7% ytd) in Q3, but lags for the year.

While price declines have not been pleasant, one benefit is that valuations have improved (based on forward PE vs their 20yr average). The S&P 500 is now just below its 20yr average, while the other major indices are at larger discounts.

S&P Sectors: Almost every S&P sector declined in Q3, with Energy (+2% Q3, +35% ytd) and Consumer Discretionary (+4% Q3, -30% ytd) the only two rising. Utilities (-6% Q3, -7% ytd), Staples (-7% Q3, -12% ytd) and Healthcare (-5% Q3, -13% ytd) have held up on perceived safety. The laggards were Communications (-13% Q3, -39% ytd), and Technology (-6% Q3, -31% ytd), reflecting a reversal from the prior two years of outperformance. Meanwhile Industrials (-5% Q3, -21% ytd), Financials (-3% Q3, -21% ytd) and Materials (-7% Q3, -24% ytd) were middle of the pack for both the quarter and year to date periods.

Growth vs Value: The relative performance of Value versus Growth was notable, as Value (-6% Q3, -17% ytd) has held up better than Growth (-4% Q3, -30% ytd), on a year to date basis, despite slight Growth outperformance in Q3. Interestingly, after the larger pullback, while Growth is still at a higher PE than Value (19.0 v 13.1), both the Value and Growth indices are now in line with their historic averages.

Global Markets: Globally, markets were lower. Europe (-11% Q3, -33% ytd) has borne the brunt of the Russia-Ukraine conflict and, in particular, its reliance on Russian gas. In Asia, China was the notable laggard (-14% Q3, -25% ytd), as concerns over Covid lockdowns and tech stock regulations lingered.

On the other hand, the S&P Latin America 40 index (+6% Q3, +6% ytd) is up slightly thanks to higher commodity prices and the ongoing presidential election in Brazil.

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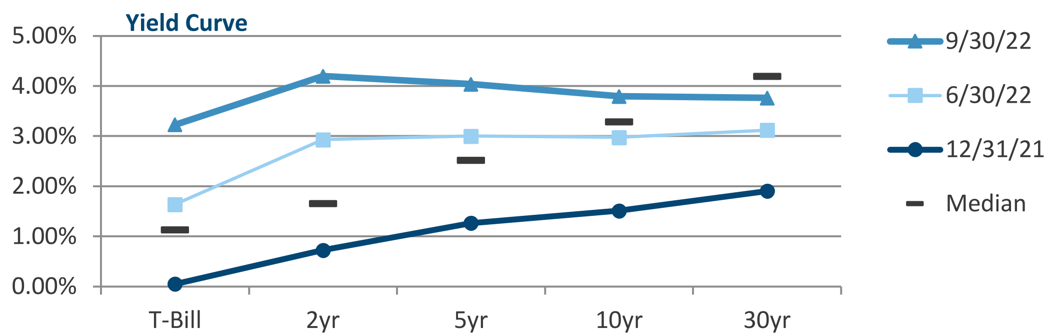
Fixed Income Markets Summary

Headline Indices	Q3'22	2022	2021	Yield	Spread	Avg*	+/- avg
Bloomberg Barc Agg	-4.8%	-14.6%	-1.5%	4.75%	0.95%	0.34%	0.61%
ML Investment Grade	-5.1%	-18.3%	-1.0%	5.74%	1.95%	1.14%	0.81%
ML High Yield	-0.7%	-14.6%	5.4%	9.61%	5.81%	4.67%	1.14%
S&P Nat'l Muni	-3.3%	-11.6%	1.6%	4.33%	0.53%	0.75%	-0.22%
S&P Leveraged Loan	1.3%	-4.3%	3.5%	5.81%	2.58%	4.00%	-1.43%
T-Bill	0.5%	0.6%	0.0%				
NYMEX 7-10yr Tsy	-5.5%	-15.7%	-3.1%				
Treasury Yields	**9/30/22**	**6/30/22**	**12/31/21**			**Avg***	**+/- avg**
T-Bill	3.23%	1.64%	0.05%			1.13%	2.10%
2yr	4.20%	2.93%	0.73%			1.66%	2.54%
5yr	4.04%	3.00%	1.26%			2.52%	1.52%
10yr	3.80%	2.98%	1.51%			3.29%	0.50%
30yr	3.77%	3.12%	1.90%			4.20%	-0.43%
10yr Sovereign Yields	**9/30/22**	**6/30/22**	**12/31/21**			**Avg***	**+/- avg**
US	3.80%	2.98%	1.51%			2.43%	1.36%
Germany	2.13%	1.38%	-0.18%			1.31%	0.82%
Japan	0.24%	0.22%	0.07%			0.26%	-0.02%
UK	4.14%	2.31%	0.97%			2.02%	2.12%
France	2.74%	1.96%	0.20%			2.25%	0.49%
Spain	3.31%	2.46%	0.57%			3.29%	0.02%
Italy	4.55%	3.29%	1.17%			3.50%	1.05%
China	2.78%	2.84%	2.79%			3.41%	-0.63%
Brazil	12.21%	13.28%	10.97%			11.02%	1.19%
Mexico	9.65%	9.03%	7.56%			7.42%	2.23%



Asset Classes: The bond market, as measured by the Bloomberg Barclays Aggregate Bond Index (-4.8% Q3, -14.6% ytd), has declined as interest rates have risen.

Duration: The primary driver of fixed income performance was duration, which was evident in the Treasury market. The longer duration 7-10 yr Treasury Index (-5.5% Q3, -15.7% ytd) underperformed near zero duration 90 day T-Bills (0.5% Q3, 0.6% ytd).

Credit: The same was seen further out the credit spectrum, with the ML High Yield index (-1% Q3, -15% ytd) down more than the low duration S&P Leveraged Loan Index (+1% Q3, -4% ytd). The ML Investment Grade Index (-5% Q3, -18% ytd) reflected its duration component. While Q2 saw a credit sell off, Q1 and Q3 were more duration driven, and thus credit has held up well despite recession concerns.

Treasury Yields: Rising interest rates is a major market development thus far in 2022. During Q3, the 10yr Treasury rose 82 bps, from 2.98% to 3.80%, more than double from where it started the year, at 1.51%.

Yield Curve: The yield curve is the best tool to examine rate shifts across different maturities. The market's expectations for Fed interest rate hikes over the next two years clearly shifted, as the 2yr Treasury rose 347 bps, from 0.73% to 4.20%, this year. Fed expectations also caused the 10yr Treasury to rise, but only by 229 bps, as the longer end of the curve has to balance the offsetting impact of the short-term Fed rate hikes leading to lower growth or inflation in the long-term.
Short term rates rising faster than long term rates is known as a flattening yield curve. And because of this, in some instances, such as the 4.20% 2yr Treasury versus the 3.80% 10yr Treasury, a shorter term rate is atypically higher than a longer term rate. This is known as inversion.
Market commentators closely watching the 2yr to 10yr curve. When it is inverted, it is a sign the markets are concerned rate hikes could cause a recession.

Global Rates: Globally, interest rates have moved from negative to positive. Notably, Germany 2.13% vs -.18% on 12/31/21) has moved out of negative yielding territory.

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Major Economic Indicators and Consensus Forecasts

	2022/2023 Average Forecast				Actual		
	12m ch	Sep-22	Jun-22	Sep-21	Aug-22	Avg*	+/- avg
US GDP	-2.00	1.30	2.15	3.30	1.80	2.31	-0.51
EU GDP	-1.40	1.70	2.25	3.10	4.15	1.84	2.31
Japan GDP	-0.35	1.60	1.70	1.95	1.42	0.95	0.47
UK GDP	-2.03	1.75	2.28	3.78	4.38	2.18	2.19
China GDP	-1.10	4.30	4.70	5.40	4.76	8.00	-3.24
US CPI	1.83	4.53	4.38	2.70	8.25	1.81	6.44
EU CPI	2.70	3.98	3.15	1.28	9.14	1.22	7.92
Japan CPI	1.28	1.88	1.40	0.60	3.01	0.41	2.60
UK CPI	0.00	1.70	1.70	1.70	9.87	1.72	8.15
China CPI	0.05	2.30	2.25	2.25	2.49	1.84	0.64
US UnN	-0.02	3.93	3.75	3.95	3.70	4.60	-0.90
EU UnN	-0.68	6.93	6.83	7.60	6.70	8.40	-1.70
Japan UnN	0.10	2.50	2.50	2.40	2.60	2.80	-0.20
UK UnN	-0.30	4.18	3.98	4.48	4.00	4.40	-0.40
China UnN	-0.03	3.98	3.80	4.00	5.80	5.20	0.60

Foreign Exchange		Q3'22	2022	2021	2020	2019	2018
Euro		-6%	-14%	-7%	9%	-2%	-5%
Yen (Japan)		-6%	-20%	-10%	5%	1%	3%
Pound (UK)		-8%	-18%	-1%	3%	4%	-6%
Yuan (China)		-6%	-10%	3%	7%	-1%	-5%
Won (S. Korea)		-9%	-17%	-9%	6%	-4%	-4%
Real (Brazil)		-3%	3%	-7%	-23%	-4%	-14%
Peso (Mexico)		0%	2%	-3%	-5%	4%	-1%
Commodities		**Q3'22**	**2022**	**2021**	**2020**	**2019**	**2018**
Oil	$79	-26%	6%	56%	-21%	35%	-25%
Gold	$1,672	-8%	-7%	-4%	25%	18%	-1%
Copper	$3.44	-7%	-23%	27%	26%	6%	-20%

GDP: Shifting economic forecasts show how market expectations have changed in the past three months. Compared to 6/30/22, blended 2022/2023 GDP forecasts for the US are down 85 bps to 1.30%. EU, UK and Japan are all around 1.5%, too. China remains higher, at 4.3%, but the forecast is down as well. Cumulatively, this reflects the expectation that global central bank action will slow the economy.

CPI: The year over year rise in inflation expectations is the major cause of tighter central bank policy. For the US, on a year over year basis, the CPI forecast has jumped from 2.7% to 4.5%. Of this 1.8% 12 month rise, 1.3% happened just in Q1'22. Similarly, EU CPI forecast has risen from 1.28% to 2.70%.

Unemployment: Unemployment forecasts, thus far, have not moved very much, rising only 20 bps in the past three months, leaving them flat versus a year ago. Part of this is because of the tight labor market. But it is also a sign economic forecasters do not think the preceding lower GDP and higher inflation expectations will be enough to impact the labor market. Ironically, with the Federal Reserve focused on the tight labor market, the lack of change is keeping them raising rates, and ultimately making an unemployment boosting downturn more likely.

Foreign Exchange: Currencies have garnered headlines in 2022. With the Fed raising rates faster than most other central banks, the dollar has strengthened versus most global currencies, especially the euro, yen and pound. We typically make two observations about foreign exchange. First, it is self correcting and has offsetting effects. For example, foreign exchange has been a drag for international stock returns in 2022, but it could boost international stock profits as their dollar earnings rise and their non-dollar priced products become more competitive. This will likely be the case again. The second observation is that currency moves are most manageable when they are slow, as they allow the self correcting forces to work. But if the move is fast, they can cause self reinforcing trends, such as investor outflows, that can cause market disruption. Problems have not yet emerged, but until currency trends stabilize, there is the risk for an issue to arise.

Commodities: Oil fell 26% to $79/bbl in Q3'22, leaving it only 6% higher in 2022, and well off its high of $130. The initial price surge after Russia invaded Ukraine was caused by concern over supply shortage. But the spike in oil contributed to inflation pressures, which has caused central banks to accelerate their pace of interest rate hikes, raising recession fears, and causing investors to shift from worries about adequate supply to a drop in demand instead. The lower economic outlook can also be seen in copper, which was down 7% in Q3, leaving it 23% lower on the year. Although seen as an inflation hedge and safe haven, gold fell 8% in Q3 (for a 7% ytd decline).

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Index Returns | 2005 to Present

	Q3'22	2022 ytd	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Dow	-6.2%	-19.7%	20.9%	9.7%	25.3%	-3.5%	28.1%	16.5%	0.2%	10.0%	29.7%	10.2%	8.4%	14.1%	22.7%	-31.9%	8.9%	19.0%
Nasdaq	-4.1%	-32.4%	21.4%	43.6%	35.2%	-3.9%	28.2%	7.5%	5.7%	13.4%	38.3%	15.9%	-1.8%	16.9%	43.9%	-40.5%	9.8%	9.5%
Russell 2000	-2.2%	-25.1%	14.8%	20.0%	25.5%	-11.0%	14.6%	21.3%	-4.4%	4.9%	38.8%	16.3%	-4.2%	26.9%	27.2%	-33.8%	-1.6%	18.4%
S&P 500	-4.9%	-23.9%	28.7%	18.4%	31.5%	-4.4%	21.8%	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%	26.5%	-37.0%	5.5%	15.8%
S&P Mid Cap 400	-2.5%	-21.5%	24.8%	13.7%	26.2%	-11.1%	16.2%	20.7%	-2.2%	9.8%	33.5%	17.9%	-1.7%	26.6%	37.4%	-36.2%	8.0%	10.3%
S&P Small Cap 600	-5.2%	-23.2%	26.8%	11.3%	22.8%	-8.5%	13.2%	26.6%	-2.0%	5.8%	41.3%	16.3%	1.0%	26.3%	25.6%	-31.1%	-0.3%	15.1%
MSCI EAFE	-9.3%	-26.8%	11.8%	8.3%	22.7%	-13.4%	25.6%	1.5%	-0.4%	-4.5%	23.3%	17.9%	-11.7%	8.2%	32.5%	-43.1%	11.6%	26.9%
MSCI Emerging Markets	-11.4%	-26.9%	-2.2%	18.7%	18.9%	-14.2%	37.8%	11.6%	-14.6%	-1.8%	-2.3%	18.6%	-18.2%	19.2%	79.0%	-53.2%	39.8%	32.6%
MSCI All Country World	-6.7%	-25.3%	19.0%	16.8%	27.3%	-8.9%	24.6%	8.5%	-1.8%	4.7%	23.4%	16.8%	-6.9%	13.2%	35.4%	-41.8%	12.2%	21.5%
S&P Growth	-3.9%	-30.4%	32.0%	33.5%	31.1%	0.0%	27.4%	6.9%	5.5%	14.9%	32.8%	14.6%	4.7%	15.1%	31.6%	-34.9%	9.1%	11.0%
S&P Value	-5.8%	-16.6%	24.9%	1.4%	31.9%	-9.0%	15.4%	17.4%	-3.1%	12.4%	32.0%	17.7%	-0.5%	15.1%	21.2%	-39.2%	2.0%	20.8%
Barclays Aggregate Bond	-4.8%	-14.6%	-1.5%	7.5%	8.7%	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%	5.2%	7.0%	4.3%
ML Investment Grade	-5.1%	-18.3%	-1.0%	9.8%	14.2%	-2.2%	6.5%	6.0%	-0.6%	7.5%	-1.5%	10.4%	7.5%	9.5%	19.8%	-6.8%	4.7%	4.4%
ML High Yield	-0.7%	-14.6%	5.4%	6.2%	14.4%	-2.3%	7.5%	17.5%	-4.6%	2.5%	7.4%	15.6%	4.4%	15.2%	57.5%	-26.4%	2.2%	11.7%
S&P Nat'l Muni	-3.3%	-11.6%	1.6%	4.9%	7.4%	1.0%	5.1%	0.4%	3.3%	8.9%	-3.3%	6.5%	11.2%	2.0%	12.2%			
S&P Leveraged Loan	1.3%	-4.3%	3.5%	2.8%	10.7%	-0.6%	3.3%	10.9%	-2.8%	1.0%	5.0%	10.5%	0.6%	9.7%	52.2%	-28.2%	1.7%	6.6%
T-Bill	0.5%	0.6%	0.0%	0.6%	2.2%	1.8%	0.8%	0.3%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%			
7-10yr Tsy	-5.5%	-15.7%	-3.1%	10.0%	8.5%	0.9%	2.6%	1.1%	1.6%	9.0%	-6.0%	4.2%	15.6%	9.4%	-6.0%	18.0%	10.2%	2.7%

International	Q3'22	2022 ytd	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
MSCI Eurozone	-10.5%	-32.6%	14.3%	8.5%	24.2%	-16.2%	29.0%	2.2%	-0.8%	-7.7%	30.0%	22.5%	-16.9%	-3.4%	32.8%	-47.1%	20.3%	37.3%
Germany (DAX)	-5.2%	-23.7%	15.8%	3.5%	25.5%	-18.3%	12.5%	6.9%	9.6%	2.7%	25.5%	29.1%	-14.7%	16.1%	23.8%	-40.4%	22.3%	22.0%
UK (FTSE)	-3.8%	-6.6%	14.3%	-14.3%	12.1%	-12.5%	7.6%	14.4%	-4.9%	-2.7%	14.4%	5.8%	-5.6%	9.0%	22.1%	-31.3%	3.8%	10.7%
Japan (Nikkei)	-1.7%	-9.9%	4.9%	16.0%	18.2%	-12.1%	19.1%	0.4%	9.1%	7.1%	56.7%	22.9%	-17.3%	-3.0%	19.0%	-42.1%	-11.1%	6.9%
MSCI Asia Pac xJapan	-12.6%	-26.2%	-2.7%	22.8%	19.5%	-13.7%	37.3%	7.1%	-9.1%	3.1%	3.7%	22.6%	-15.4%	18.4%	73.7%	-51.6%	37.2%	33.2%
S. Korea (KOSPI)	-7.6%	-27.6%	3.6%	30.8%	7.7%	-17.3%	21.8%	3.3%	2.4%	-4.8%	0.7%	9.4%	-11.0%	21.9%	49.7%	-40.7%	32.3%	4.0%
India (Sensex)	8.6%	-0.3%	23.2%	17.2%	15.7%	7.2%	29.6%	3.5%	-3.7%	31.9%	10.7%	28.0%	-23.6%	19.1%	83.3%	-51.8%	48.8%	48.8%
China (Shenzhen)	-14.0%	-24.5%	8.6%	35.2%	36.0%	-33.3%	-3.6%	-14.7%	63.4%	33.9%	20.0%	1.4%	-32.9%	7.1%	116.9%	-61.8%	167.0%	96.4%
S&P Latin America 40	5.5%	6.1%	-12.7%	-11.3%	13.9%	-6.0%	26.9%	32.5%	-30.9%	-11.1%	-12.3%	6.4%	-18.3%	16.7%	97.1%	-49.4%	50.5%	42.6%
Brazil (Bovespa)	11.7%	5.0%	-11.9%	2.9%	31.6%	15.0%	26.9%	38.9%	-13.3%	-2.9%	-15.5%	7.4%	-18.1%	1.0%	82.7%	-41.2%	43.6%	32.9%
Mexico	-6.1%	-16.2%	20.9%	1.2%	4.6%	-15.6%	8.1%	6.2%	-0.4%	1.0%	-2.2%	17.9%	-3.8%	20.0%	43.5%	-24.2%	11.7%	48.6%

S&P 500 Sectors	Q3'22	2022 ytd	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Consumer Discretionary	4.4%	-29.9%	24.4%	33.3%	27.9%	0.8%	23.0%	6.0%	10.1%	9.7%	43.1%	23.9%	6.1%	27.7%	41.3%	-33.5%	-13.2%	18.6%
Consumer Staples	-6.6%	-11.8%	18.6%	10.7%	27.6%	-8.4%	13.5%	5.4%	6.6%	16.0%	26.1%	10.8%	14.0%	14.1%	14.9%	-15.4%	14.2%	14.4%
Energy	2.3%	34.9%	54.6%	-33.7%	11.8%	-18.1%	-1.0%	27.4%	-21.1%	-7.8%	25.1%	4.6%	4.7%	20.5%	13.8%	-34.9%	34.4%	24.2%
Financials	-3.1%	-21.2%	35.0%	-1.7%	32.1%	-13.0%	22.2%	22.8%	-1.5%	15.2%	35.6%	28.8%	-17.1%	12.1%	17.2%	-55.3%	-18.6%	19.2%
Healthcare	-5.2%	-13.1%	26.1%	13.4%	20.8%	6.5%	22.1%	-2.7%	6.9%	25.3%	41.5%	17.9%	12.7%	2.9%	19.7%	-22.8%	7.2%	7.5%
Industrials	-4.7%	-20.7%	21.1%	11.1%	29.4%	-13.3%	21.0%	18.9%	-2.5%	9.8%	40.7%	15.3%	-0.6%	26.7%	20.9%	-39.9%	12.0%	13.3%
Technology	-6.2%	-31.4%	34.5%	43.9%	50.3%	-0.3%	38.8%	13.8%	5.9%	20.1%	28.4%	14.8%	2.4%	10.2%	61.7%	-43.1%	16.3%	8.4%
Materials	-7.1%	-23.7%	27.3%	20.7%	24.6%	-14.7%	23.8%	16.7%	-8.4%	6.9%	25.6%	15.0%	-9.8%	22.2%	48.6%	-45.7%	22.5%	18.6%
Telecom	-12.7%	-39.0%	21.6%	23.6%	32.7%	-12.5%	-1.3%	23.5%	3.4%	3.0%	11.5%	18.3%	6.3%	19.0%	8.9%	-30.5%	11.9%	36.8%
Utilities	-6.0%	-6.5%	17.7%	0.5%	26.3%	4.1%	12.1%	16.3%	-4.8%	29.0%	13.2%	1.3%	19.9%	5.5%	11.9%	-29.0%	19.4%	21.0%

Blue to orange represents best to worst return for each period. Index data is total teturn.

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Index Definitions

Index	Description
Equity	
S&P 500	Large US companies ($10b+ market cap)
S&P Mid Cap 400	Medium US companies ($5-10b market cap)
Russell 2000, S&P Small Cap 600	Small US companies (<$10b market cap)
MSCI Europe Australia Far East	Foreign Developed. Returns are in US$
MSCI Emerging Markets	Emerging Markets. Returns are in US$
Fixed Income	
Barclays Aggregate	Represents the entire US bond market
S&P 3mo Tbill	Short term Treasury Bills
Barclays 7-10yr Tsy	Ten Year Treasury Bonds
Barclays 10yr TIPS	Treasury Inflation Protected Securities
S&P Nat'l Muni	Municipal Bonds
BofA/ML Corp	Investment Grade (Higher Credit Quality) Corporate Bonds
BofA/ML High Yield	High Yield (Lower Credit Quality) Corporate Bonds
S&P Leveraged Loan 100	Floating Rate Bank Loans
BofA / ML EM Debt	Emerging Market Debt
Alternatives	
HFRI Fund of Funds	Represents the entire hedge fund universe

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Disclosures

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-The Standard & Poor's 500 is a market capitalization weighted index of 500 widely held domestic stocks often used as a proxy for the U.S. stock market. The Standard & Poor's 400 is a market capitalization weighted index of 400 mid cap domestic stocks. The Standard & Poor's 600 is a market capitalization weighted index of 600 small cap domestic stocks.
-The NASDAQ Composite Index measures the performance of all issues listed in the NASDAQ stock market, except for rights, warrants, units, and convertible debentures.
-The MSCI EAFE Index (Europe, Australasia, Far East) is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the US & Canada. The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of 21 emerging markets. The MSCI All Country World Index is a free float adjusted market capitalization index designed to measure the performance of large and mid and cap stocks in 23 developed markets and 24 emerging markets. With over 2,800 constituents it represents over 85% of the global equity market.
-The Barlcays Aggregate Index represents the total return performance (price change and income) of the US bond market, including Government, Agency, Mortgage and Corporate debt.
-The BofA Merrill Lynch Investment Grade and High Yield Indices are compiled by Bank of America / Merrill Lynch from the TRACE bond pricing service and intended to represent the total return performance (price change and income) of investment grade and high yield bonds.
-The S&P/LSTA U.S. Leveraged Loan 100 is designed to reflect the largest facilities in the leveraged loan market. It mirrors the market-weighted performance of the largest institutional leveraged loans based upon market weightings, spreads and interest payments.
-The S&P Municipal Bond Index is a broad, comprehensive, market value-weighted index. The S&P Municipal Bond Index constituents undergo a monthly review and rebalancing, in order to ensure that the Index remains current, while avoiding excessive turnover. The Index is rules based, although the Index Committee reserves the right to exercise discretion, when necessary.
-The BofA Merrill Lynch US Emerging Markets External Sovereign Index tracks the performance of US dollar emerging markets sovereign debt publicly issued in the US and eurobond markets.
-The HFRI Fund of Funds index is compiled by the Hedge Funds Research Institute and is intended to represent the total return performance of the entire hedge fund universe.