

### **Reading the Tea Leaves**

15th Feb 2023

#### "Risk means more things can happen than will happen" Elory Dimson

The above quote is a tell-tale sign for pessimists that history has sided more often with optimists. That said, reasonable risk compensation matters and in our latest market insights, we will try to do just that i.e. eke out the elusive equity risk premium. But first let's try to make sense of yesterday's price action and, since daily moves can just be noise, also the year-to-date trend.

While yesterday's inflation data was a tad higher than consensus, the equity market was rather unfazed. Yes, the market promptly repriced the likelihood of higher-for-longer interest rates, yet cyclical and long duration equities ended the day higher whereas equity volatility lower. The same price action holds true this year — with cyclical and tech sectors outperforming defensives at the same time as rising nominal and real yield in the backdrop of an inverted yield curve (chart 1 & 2).





Upper panel cyclicals & long duration, lower panel defensives

# Chart 2: S&P, Nasdaq, and 10yr real yield



Normalized S&P (green) & Nasdaq (orange), 10yr yield inverted (yellow)

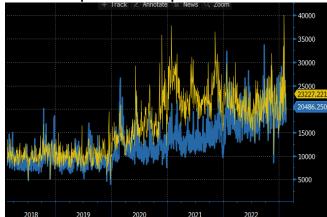
#### What may explain this divergence between rates and equities?

One plausible explanation, given the large intraday moves in SPX (chart 3), could be the impact of the option market, which has ballooned in volumes and tenors post COVID (chart 4). As per spotgamma.com "Today was a great example of ODTE SPX flows dictating price action. We saw large positive delta flows off the open at 4100, large negative delta flows at 4150, and then a repeat of positive delta flows back at 4100". In plain English it means that due to the unique market structure of US equities, its often the tail that wags the dog, especially in the short term. The key takeaway here is that any sort of risk repricing post CPI and recent rise in yields may take some time to fully reflect in equity prices.

Chart 3: Intraday moves in S&P



Chart 4: US Option volume equities and index



Yellow (call options). Blue (put options)

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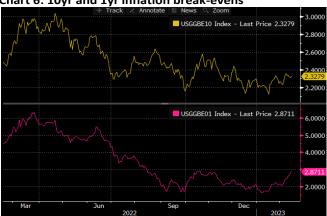
The other plausible explanation, given year-to-date rally in equities and credit, could be that financial markets is sensing that the US economy can absorb higher interest rates given strong corporate and consumer balance sheets and that the global economy is expected to fare better than feared given China reopening. It's no secret that recent economic data in the US and major economies have been surprising to the upside and we have been highlighting that this set up is likely to lead to higher-than-expected inflation and higher-for-longer interest rates (chart 5 & 6). Interestingly, the correlation between equities and 10yr real yields has weakened – perhaps a sign of an increase in risk appetite (chart 2). Meanwhile, nominal yield curve inversion has increased to -90bps but real yield curve inversion has receded to -37bps – perhaps it's the real yield curve that's more relevant than nominal given the term structure of inflation. The key takeaway here is that, despite repricing of nominal and real interest rates and inflation expectations higher, the market is not too worried for now i.e., no landing or for the future i.e., higher odds of soft-landing.

Chart 5: Economic surprises and inflation expectations



Economic surprises. EU (blue), US (yellow), Major Econ (green)

#### Chart 6: 10yr and 1yr inflation break-evens



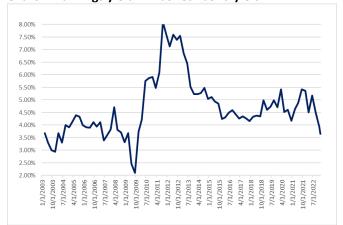
Upper panel: 10 year break-even, Lower pane: 1 year break-even

## The equity risk premium

Now coming back to getting a sense of equity risk i.e., adequate compensation if profits do not meet consensus growth estimates. There are no easy answers because for bonds risk is explicit i.e., the difference between yield-to-maturity and risk-free rate, but for equities it's implicit i.e., a function of variable profits along their growth over both the near and long term. However, we see two plausible ways to estimate equity risk premium.

First, the FED model (earnings yield minus bond yield). While this model has been successful as a descriptive tool for how investors choose to set P/E in short run, it has some shortcomings e.g., bond yield is nominal whereas earnings yield is more of a real number (according to Ibbotson, inflation pass-through of S&P 500 from 1951-2001 was more than 90%). Therefore, we use a more refined version of this FED model i.e., earnings yield minus real bond yield. Second, the implied risk premium, set forth by the guru of finance "Damodaran". Implied risk premium is estimated by using the current price of Index, consensus EPS estimates, and current bond yield. Put differently, it's analogous to the yield-to-maturity of a bond but incorporates growth element of equities.

Chart 7: Earnings yield minus real bond yield



TTM earnings yield S&P 1Q, 10yr real yield

Chart 8: Implied equity risk premium



Consensus EPS growth 2023 & 2024, 5% growth 2025-2027, 3.7% in perpetuity

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## Conclusion

Both earnings less real bond yield and implied risk premium suggest that a lot of good news seem to be priced in with 2023 and 2024 forward S&P P/E of 18.35x and 16.5x and consensus S&P EPS of 224 and 250 respectively. Usually, analysts have overestimated earnings beyond 12 months, so unless this time it will be different i.e., EPS growth meets/beats estimates due to higher-than-expected economic growth or interest rates decline for the right reasons, equity valuation is likely to face pressure.

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