GENERALI INVESTMENTS

Core Matters
Relative asset performance: still a chance for equities

August 11, 2021

Authors: Elisa Belgacem / Michele Morganti / Federica Tartara

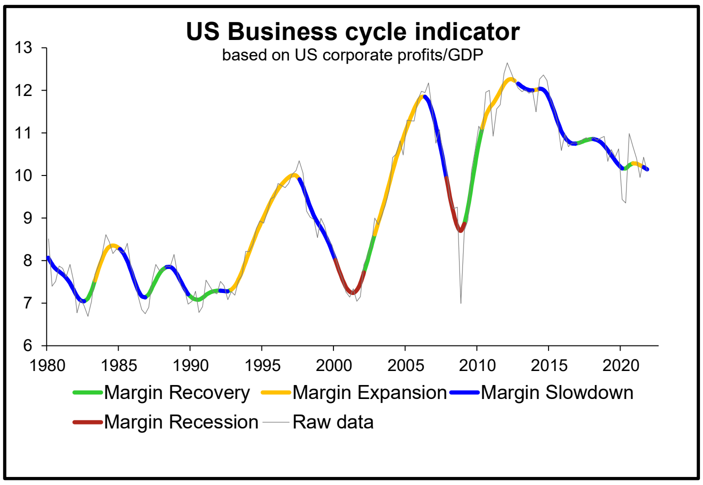
- According to historical analysis, levels at which yields hurt the relative performance of equities versus bonds are distant from current ones. Mind the 2% threshold for the US 10-year T-bond yield.
- This cycle may be different. The long downward trend of real rates has made equities more dependent on low rates. Even a small increase in yields could hurt valuations, e.g. PEs. But strong earnings growth is offering some cushion.
- The 12m yield/equity correlation turned negative (till -0.6), i.e. equities are more exposed to a yield increase. Even if it has moved to zero lately, it could remain in negative territory for longer.
- We also looked at the effects of higher bond volatility and sharp yield changes. Historically, they have not been a cause per se of a negative performance of equities versus bonds.
- Lessons from the past in the relative play equity versus credit have to be taken carefully, as the public focus on economic preservation has made the tail risk on credit much thinner than before Covid.

The environment in which investors operate is changing: the business cycle is peaking, and yields are expected to rise both in real and nominal terms, albeit moderately. In this paper, we deep dive into the main consequences for the relative performance of equities (vs bonds). We start with an historical analysis and then try to elaborate what may be different this time. As they say, history does not repeat itself, but it rhymes.

The outline of the paper is as follows. First, we study the performance of equities in the current phase of the cycle as signalled by **our Profit Margin Indicator**. Second, we analyse the **performance of equities relative to Treasuries** at given nominal and real yields, looking at history and considering current peculiarities. Third, we consider the effects of the recent change in **equity-bond correlation**. Fourth, we look at some **stress situations**: extreme yield movements and high bond volatility. We also look at the performance of **equities relative to credit**. Finally, we highlight how the policy reaction to the pandemia may have changed the risk-return profile for credit.

Box 1 - Profit Margin indicator

It is based on the trend in the pre-tax US NIPA profits/GDP, transformed into the distance from its 5Y rolling peak. We use it to identify the four phases that characterize a profit margin cycle: **Margin Recovery**, **Margin Expansion**, **Margin Slowdown** and **Margin Recession**

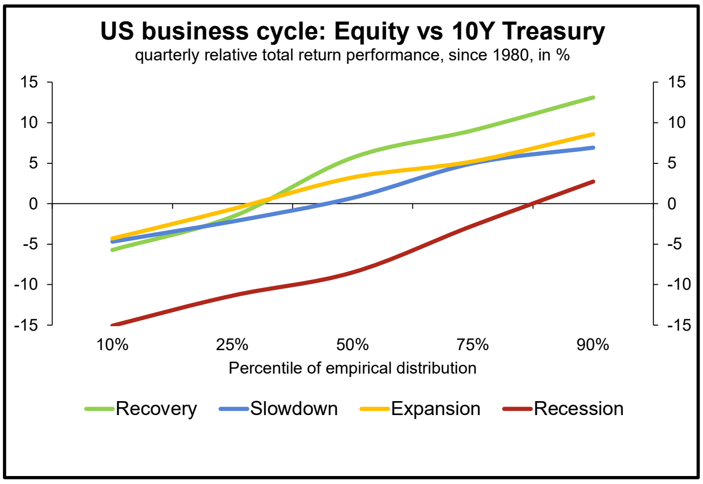


A margin Slowdown just began

According to our proprietary Profit Margin Indicator (see Box 1) and to our forecast of Nipa profits, in Q3 2021 we are seeing a transition from a Margin Expansionary phase to Margin Slowdown.

Equities should be resilient against Treasuries

Our analysis (see Box 2) shows that since 1980 the vol-adjusted median excess return of US equities (S&P500) over Treasuries **has been positive during Margin Slowdown** (+0.7% quarterly). Moving from Margin Expansion to Margin Slowdown does not harm equities significantly. Only in Margin Recession there is a consistent underperformance of equities vs bonds.



Box 2 - Equities vs Bonds relative performance in each stage of the Profit Margin indicator

For each phase of the Profit Margin cycle, we calculate the quarterly relative performance (total return differential, from 1980) of US equities vs Treasuries. We consider the distribution of the relative return to have an insight on the dispersion around the median.

Mind the 2% level for the US 10-year T-bond yield

In the past, a slowdown in margins has not necessarily been a sign of future equity underperformance relative to bonds. But what may happen if bond yields start rising again, as we approach Fed tapering? **We look at the past** (see Box 3 for details) **for some guidance, keeping in mind that we are in a crucial phase as a very long downward trend in nominal and real yield is probably coming to an end.**

GIAM Macro & Market Research expects the 10-year T-bond yield to increase from the current level (1.3%) towards 1.45% in the next 3 months and to 1.75% in the next 6 months. After nominal yields have been in the [1.5% 2%] bracket US equities have usually performed better than Treasuries. This holds true both for median and for worst returns.

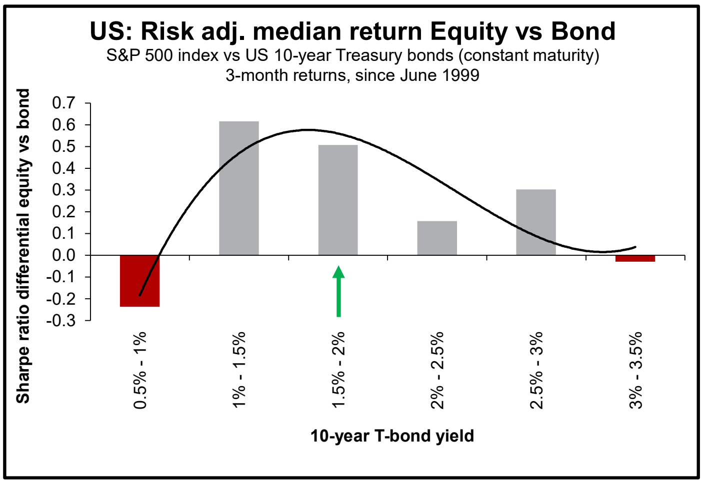
On a longer horizon (12 months), **Macro & Market Research** expects the 10-year T-bond yield to rise towards 2%. The median excess return of equities has been positive also in the [2% 2.5%] bracket. **Compared to the previous yield bracket however, excess return is lower and turns negative in terms of drawdowns (the worst loss calculated as the 1° percentile of the distribution)**. So, some **caution would be needed**.

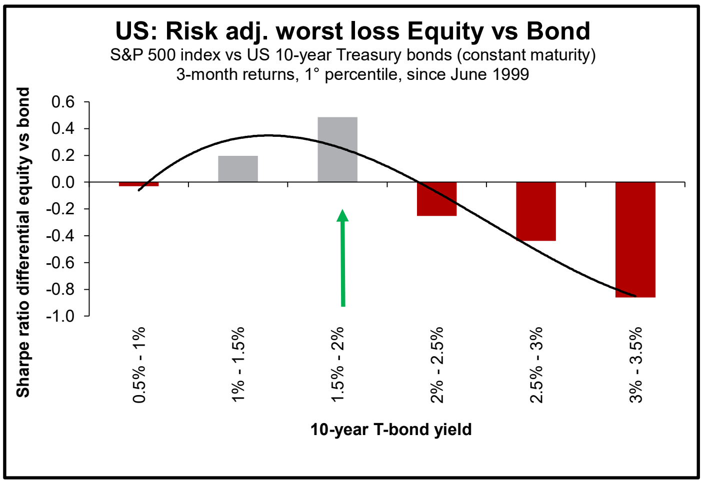
Box 3 - Equities vs Bonds relative performance based on nominal and real yield levels, since 1999

We calculate the difference of total return of US equities minus T-bonds - adjusted for the respective volatility (Sharpe ratio) - in the 3m after 10Y yields have been between given levels (with 0.5% intervals).

We consider median returns and minimum returns. Drawdowns are indeed key. Investors make their decisions looking at the worst loss they may incur (relative risk considerations).

So, for instance, we take different brackets of the 10Y T-bond yield (when the level was between 1% and 1.5%, or 1.5% and 2% and so forth) and calculate the relative performance of equities over bonds in the 50° percentile (median) and in the 1° percentile (worst loss).





Higher real yields but low starting point

We run the relative performance analysis for **real yields** to see if they are supportive for equities at current levels too. Using long-term inflation expectations, published by the US Cleveland Federal Reserve, we obtain that the real 10-year T-bond yield is -0.3% at present.

The conclusion of the historical analysis does not change from the one on nominal yields: such **low real yield levels are supportive for equity returns over bonds**. However, we expect real yields to increase. Based on historical analysis, only **a rise of more than 80bp from current level**

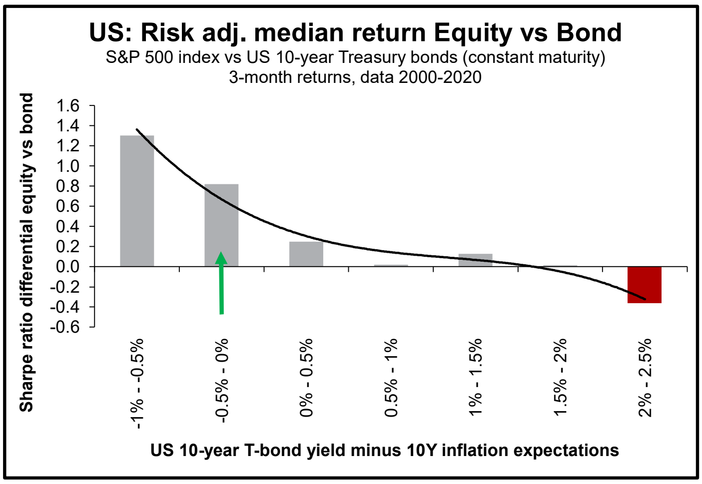
would reduce the risk adjusted excess return of equities to almost zero.

Arguably, the change in yields (nominal or real) may be more important than actual levels. The past few years seem to have seen a switch to a new paradigm where real rates have dropped to exceptionally low/negative levels, pushing **cross-asset valuations** higher and making equities (among other assets) **generally more dependent on real rates**. Differently form the past, an increase in real yields, **even if small**, could harm investors' confidence and damage valuations (e.g. PEs).

Moreover, given that the natural rate has been in a secular decline, respective yield levels may be a bit less favourable to equities today compared to historical analysis as they reflect less accommodative conditions now.

Current earnings growth is offering some cushion. But **risks are rising: Covid variants, peaking cycle, fading policy support, higher inflation, positioning, and elevated valuations.**

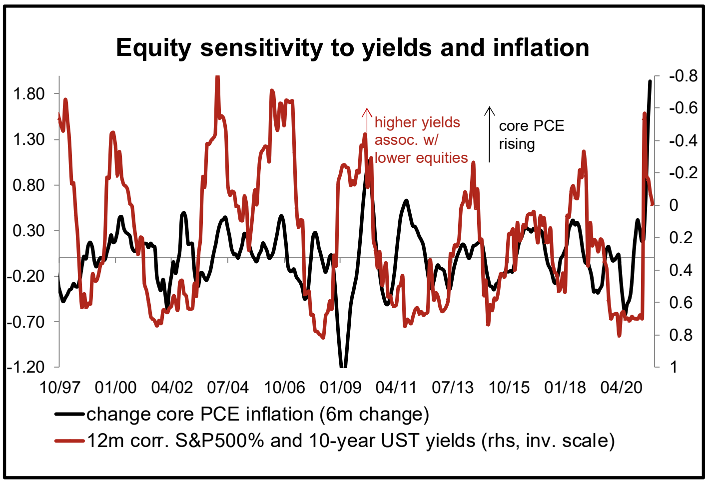
All in all, levels at which nominal and real rates hurt equity versus bonds are relatively distant. We still expect positive equity total returns (more in EU than in US) but risks are rising.



Negative yields/equity correlation

The switch of the yields/equity correlation to negative is not just bad news for portfolio diversification, **it also exposes equity investors to a sudden rebound in yields.**

Rolling correlation calculated over 5 years shows a clear downward trend which pushed it in negative territory at present. Looking at correlation over shorter horizons we observe that 12m yields/equity correlation has shifted prom positive to negative along the business cycle. When economic and price dynamics are strong, good data may feed overheating worries and fears of earlier monetary tightening (weighing on market multiples, i.e. valuation). This was indeed the situation in Spring 2021. More recently, though, the 12m yields/equity correlation has moved from the peak of -0.6 (not seen in the last 15 years) to zero most lately. From a statistical point of view such level means indeed there is no significant correlation. Looking forward, we could face a stickier upward trend in inflation when compared to past cycles. In this case the 12m correlation could remain in negative territory for longer (see chart below[1]).



Effects on equity of a turmoil in the bond market

Given the risk of rising yields going forward, we looked also at yield changes (in addition to yield levels) and bond volatility as relevant drivers to relative returns. The idea is to investigate what happened in the past after a turmoil materialised in the bond market (yield moving fast or spiking bond volatility). Details of the analysis are in Box 4.

Box 4 - Equities vs Bonds relative performance since 1999, based on changes in nominal yields and bond volatility

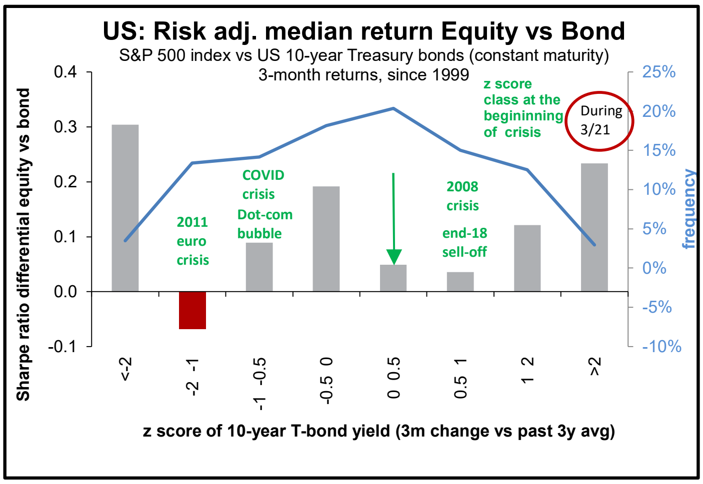
We calculate the total return of US equities over T-bonds - adjusted for the respective volatility - 3, 6 and 12 months after different magnitude of yield changes and after distinct bond volatility regimes.

The yield z-score is the distance from the 3Y average of the 3m (6m) change in 10Y yield divided by its standard deviation in the last 3 years. 5 brackets have been created. The frequency is very low in the tails (3% each).

Bond volatility is the annualized volatility (rolling 3m, calculated on daily returns) of the 10Y yield, measured over 3m (6m). 5 brackets have been created: each of equal frequency of cases.

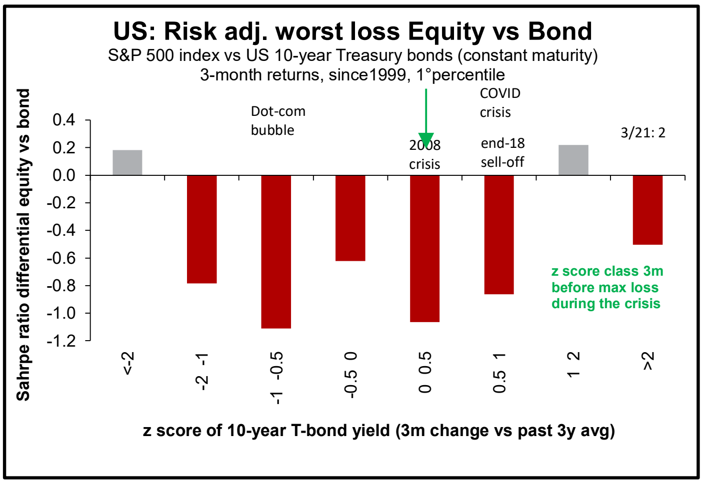
First, after abnormal (z-score>2, z<-2) yield changes, equities benefited. Moreover, after **large yield increases** (z >2), **equities have outperformed bonds, not only after 3 months but also after 6 and 12 months.**

[1] We thank Dr.Thomas Hempell for providing it



Secondly, not only relative returns but **also stand-alone equity returns were the highest** at the tails of the distribution. Lastly, **none of the past significant crisis started after a significant change in yields**.

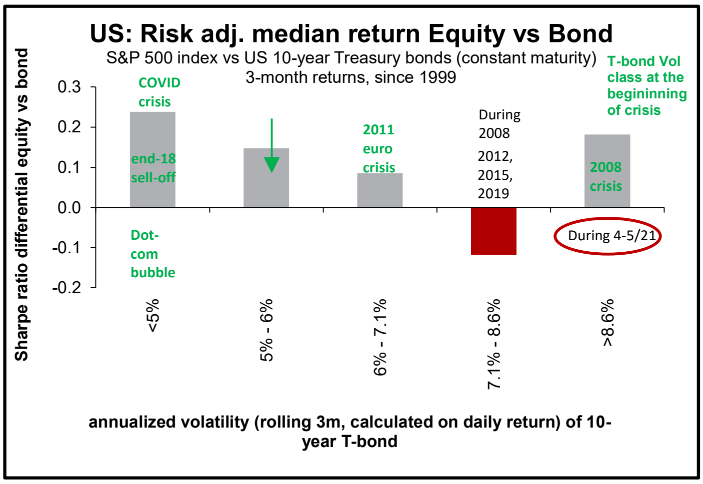
Given our scenario of a smooth rise in nominal yields, let's have a look at the [0 0.5] and [0.5 1] brackets. Even if they show positive excess returns of equity, they are clearly lower than in case of a smooth *decline* of yields. Moreover, drawdowns in the past have been among the highest after those z-score brackets. **So, our key message is that under our expectation of slightly higher yields, we are still in a positive environment for equities relative to Treasuries, but the gains will be lower than before, and drawdowns can be more harmful.**



Looking at bond volatility we observe that there is a downward profile of the 3m **excess returns of equity as volatility increases and vice versa**. Relative equity returns are indeed the highest after bond volatility is low. Such returns **decrease as bond volatility rises, till becoming negative** as bond volatility goes to the maximum, a sign of distress; but at this point bonds hurt more than equities. After bond volatility has been very high also the stand-alone equity return is among the best ones.

Keep in mind however that **very high or very low bond volatility** becomes **harmful for equities in the longer run** (**12 months** relative returns).

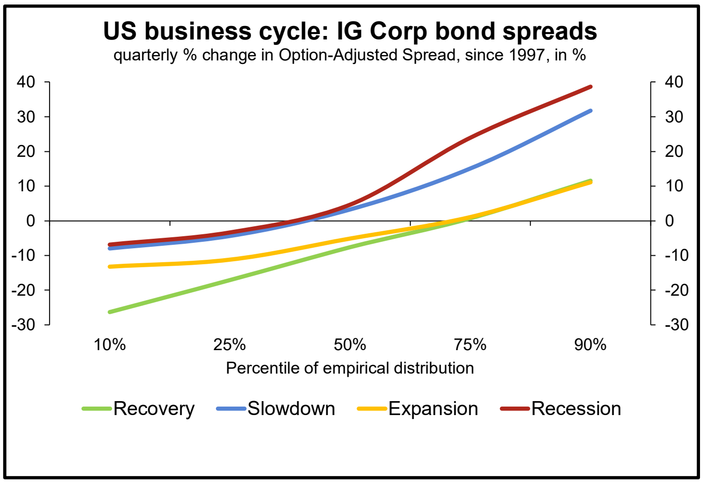
If we expect a smooth path towards higher rates, the profile does not bode badly for equities. But on a smooth path there can always be periods of stress (like the one in spring of 2021), for example linked to exiting ultra-loose monetary policies at the time when assets' valuation is historically expensive, sovereign debt high and inflation sticky and tilted to the upside.



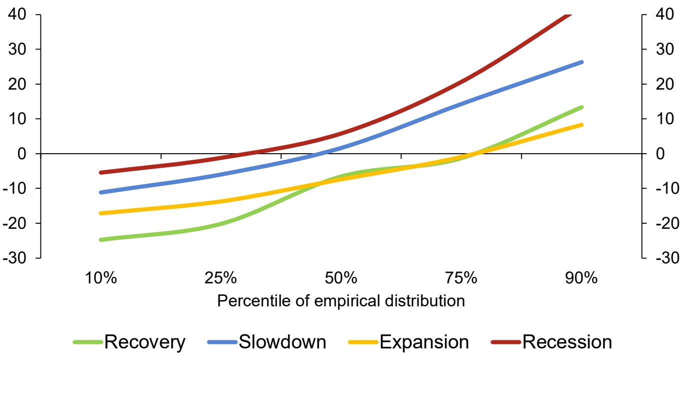
Credit spreads in Margin Slowdown

Credit, unsurprisingly, has experienced on average a very tiny widening of spreads during **Margin Slowdown** (3.2% for Investment grade and 1.6% for High yield).

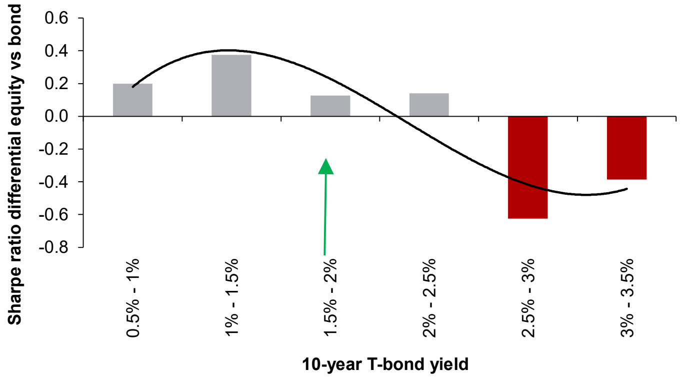
> **Box 5 - Credit performance in each stage of the margin indicator**
>
> For each phase of the Profit Margin cycle, we calculate the quarterly performance (% change in spreads, from 1980) of US credit. We consider the distribution to have insight on the dispersion around the median return.



US business cycle: HY Corp bond spreads
quarterly % change in Option-Adjusted Spread, since 1997, in %



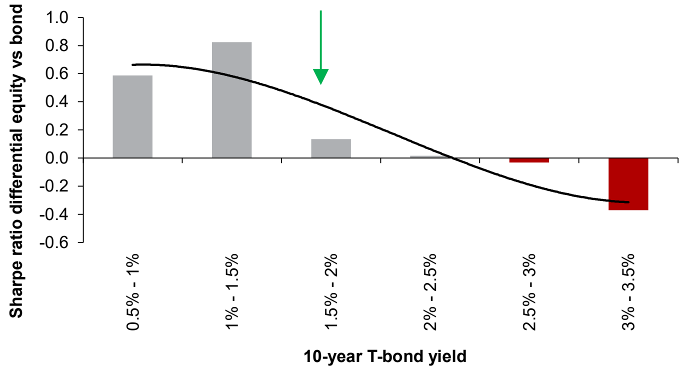
US: Risk adj. worst loss Equity vs HY
S&P 500 index vs ICE BofA US High Yield Index
3-month returns, 1° percentile, since 1999



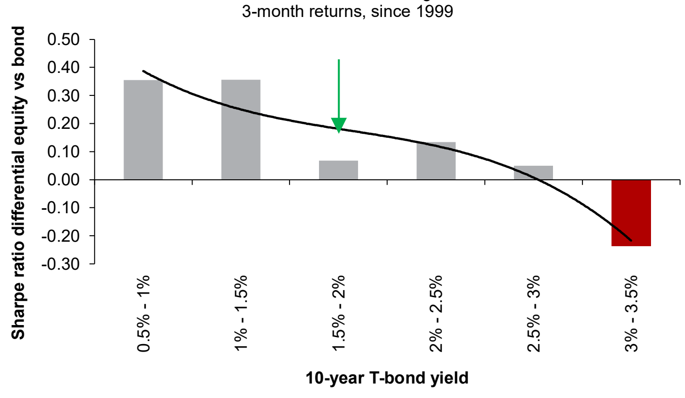
Watch the 2.5% level of 10-year yield for a switch

For low nominal yields equities have outperformed credit. **The excess return of equity over credit is maximum when the nominal yield is between 1-1.5%. Then it starts decreasing.** At the **2.5% critical level of the 10-year T-bond** yield investors should pay high attention, **since IG performs better (risk adjusted) and HY drawdowns are less harmful.**

US: Risk adj. median return Equity vs IG
S&P 500 index vs ICE BofA US Investment Grade Index
3-month returns, since 1999

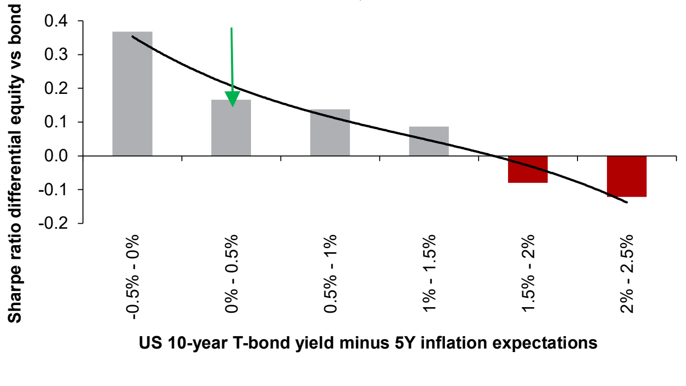


US: Risk adj. median return Equity vs HY
S&P 500 index vs ICE BofA US High Yield Index
3-month returns, since 1999



Looking at real yields, in the past they had to rise above 1.5%, quite far from the current level (-0,2%, but expected to rise slightly in the [0-0.5%] bracket), before HY outperformed equity.

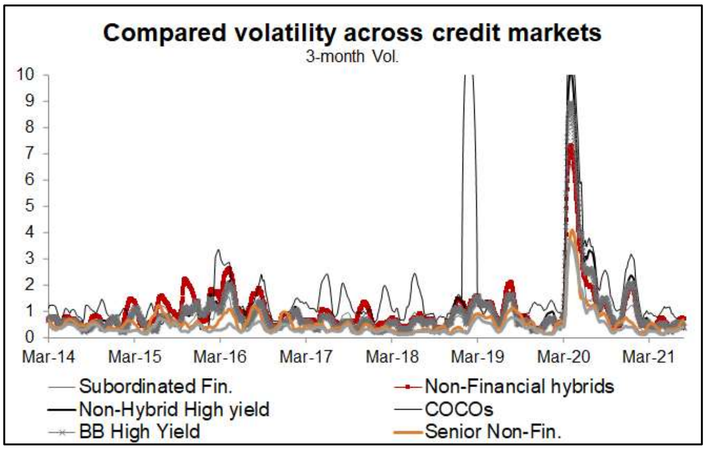
US: Risk adj. median return Equity vs HY
S&P 500 index vs ICE BofA US High Yield Index
3-month returns, since 1999



Credit likely on a low-volatility regime for longer

The default gap (standard model vs actual) has been particularly high through the Covid crisis as public policies have been implemented to ensure economic preservation at all costs. While the fiscal support was exceptional and is likely to be gradually withdrawn over the coming quarters, **the monetary support to credit markets will likely remain stronger for longer**.

Several central banks including the ECB and the Bank of England had already purchased credit before Covid but the emergence of the pandemic **has clearly changed the status of credit, making it a key tool of monetary policy transmission for all major central banks**. Some central banks remain active buyers of credit as of now like the ECB (both via APP and PEPP) while others like the Fed have stopped their direct support to the credit market already. Yet we suspect that beyond Covid, purchasing corporate bonds will remain permanently part of the central banks' toolkit. Credit purchases could be easily reactivated on any major event, hence making **the tail risk on credit markets permanently thinner**. In Europe for instance the ECB adopted in July a new strategy, implying that it will continue purchase assets, and credit in particular, possibly beyond 2025; its APP, which comprises the CSPP, representing currently more than EUR 5bn of credit purchases per month, will continue to run until short before the ECB will hike rates.



Indeed, purchasing credit from a central banker's perspective has several advantages:

1/ **First it is supporting large corporate financing conditions, a key pillar of monetary policy.** Doing so it largely reduces the liquidity risk on credit markets as for instance in Europe during Covid the primary market barely closed, and solid IG-rated corporates kept issuing at an elevated pace even in Spring 2020. Doing so, **central banks directly help avoiding economic destruction of viable companies which will remain beyond Covid a key focus of public policies.**

2/ **The marginal effectiveness of supporting credit is much higher than on the government bonds market**, hence central banks have to put only "little amounts" on the table to stabilise the corporate bond market.

3/ **It has a trickle-down effect both on HY and the loan market i.e. smaller companies.** The Fed bought HY through Covid but it remains an exception, hence while most central banks have focused their efforts on near-zero default risk companies, namely IG-rated ones, their activity on the market has also helped to lower volatility on riskier debt instruments, also lowering liquidity risk for smaller companies.

Hence **in the future we suspect the risk profile of credit as an asset class might have been permanently affected by the pandemic.** On the risk side, as explained, **the public focus on economic preservation is making the tail risk on credit much lower than before Covid**. Yet on the return side as well **the current very low spreads very low rates environment is capping future total returns.**

Conclusions

According to historical analysis, levels at which nominal and real yields hurt the performance of equities versus bonds **are distant from current ones**. For the US 10-year Treasury yield the 2% threshold is key in reassessing equity versus bond attractiveness. Current low real yields levels are supportive too. A slight increase in yields, both nominal and real, should not make a significant difference. **However, this cycle may be different**: Real yields have been on a downward trend in the last 30 years, pushing cross-asset valuations higher and making them generally more dependent on real rates. An increase in real yields, even if small, could damage PEs. Furthermore, given that the natural rate has been in a secular decline, respective yield levels may be a bit less favourable to equities today compared to historical analysis as they reflect less accommodative conditions now. Of course, currently EPS growth is offering some cushion.

Moreover, investors are getting nervous about negative yields/equity correlation. This would **make equities vulnerable to a re-bound in yields**.

Lastly, even in the (unlikely) case where the process of the increase in yields would not be smooth (high bond volatility or huge yield movements), we have observed that in the past this did not cause a negative performance of equities versus bonds.

We still expect positive equity total returns (more in EU than in US) **but** risks (Fed progressively changing stance, peaking cycle, fading effect of fiscal impulse, higher inflation, positioning, high valuations, Covid variants) at this point are growing and **we suggest a more cautious approach**.

On credit relative to equity, **2.5% has been the critical level of the 10-year Treasury yield: then IG starts outperforming equities (risk adjusted) and HY drawdowns are less harmful.**

The risk profile of credit as an asset class might have been permanently affected by the pandemic. On the risk side, **the public focus on economic preservation has made the tail risk on credit much thinner than before Covid**. On the return side **the current very low spreads very low rates environment will cap future total returns.**

Imprint

Issued by: **Generali Insurance Asset Management S.p.A. Società di gestione del risparmio, Research Department**

Head of Research: Vincent Chaigneau (vincent.chaigneau@generali-invest.com)

Head of Macro & Market Research: Dr. Thomas Hempell, CFA (thomas.hempell@generali-invest.com)

Team:
Elisabeth Assmuth (elisabeth.assmuth@generali-invest.com)
Elisa Belgacem (elisa.belgacem@generali-invest.com)
Radomír Jáč (radomir.jac@generali.com)
Jakub Krátký (jakub.kratky@generali.com)
Michele Morganti (michele.morganti@generali-invest.com)
Vladimir Oleinikov, CFA (vladimir.oleinikov@generali-invest.com)
Dr. Martin Pohl (martin.pohl@generali.com)
Dr. Thorsten Runde (thorsten.runde@generali-invest.com)
Dr. Christoph Siepmann (christoph.siepmann@generali-invest.com)
Dr. Florian Späte, CIIA (florian.spaete@generali-invest.com)
Guillaume Tresca (guillaume.tresca@generali-invest.com)
Dr. Martin Wolburg, CIIA (martin.wolburg@generali-invest.com)
Paolo Zanghieri, PhD (paolo.zanghieri@generali.com)

Head of Insurance and AM Research: Michele Morganti (michele.morganti@generali-invest.com)

Team:
Raffaella Bagata (raffaella.bagata@generali.com)
Alberto Cybo-Ottone, PhD (alberto.cybo@generali.com)
Mattia Mammarella (mattia.mammarella@generali-invest.com)
Roberto Menegato (roberto.menegato@generali.com)
Giovanni Millo, PhD (giovanni.millo@generali.com)
Antonio Salera, PhD (antonio.salera@generali.com)
Cristiana Settimo (cristiana.settimo@generali.com)
Federica Tartara, CFA (federica.tartara@generali.com)

Sources for charts and tables: Refinitiv/Datastream, Bloomberg, own calculations
Version completed: see front page

In Italy:
Generali Insurance Asset Management
S.p.A Società di gestione del risparmio

Piazza Tre Torri
20145 Milano MI, Italy

Piazza Duca degli Abruzzi, 1
34132 Trieste TS, Italy

In France:
Generali Insurance Asset Management
S.p.A Società di gestione del risparmio

2, Rue Pillet-Will
75009 Paris Cedex 09, France

In Germany:
Generali Insurance Asset Management
S.p.A. Società di gestione del risparmio

Tunisstraße 19-23
50667 Cologne, Germany

www.generali-investments.com