Chief Investment Office

June 2021

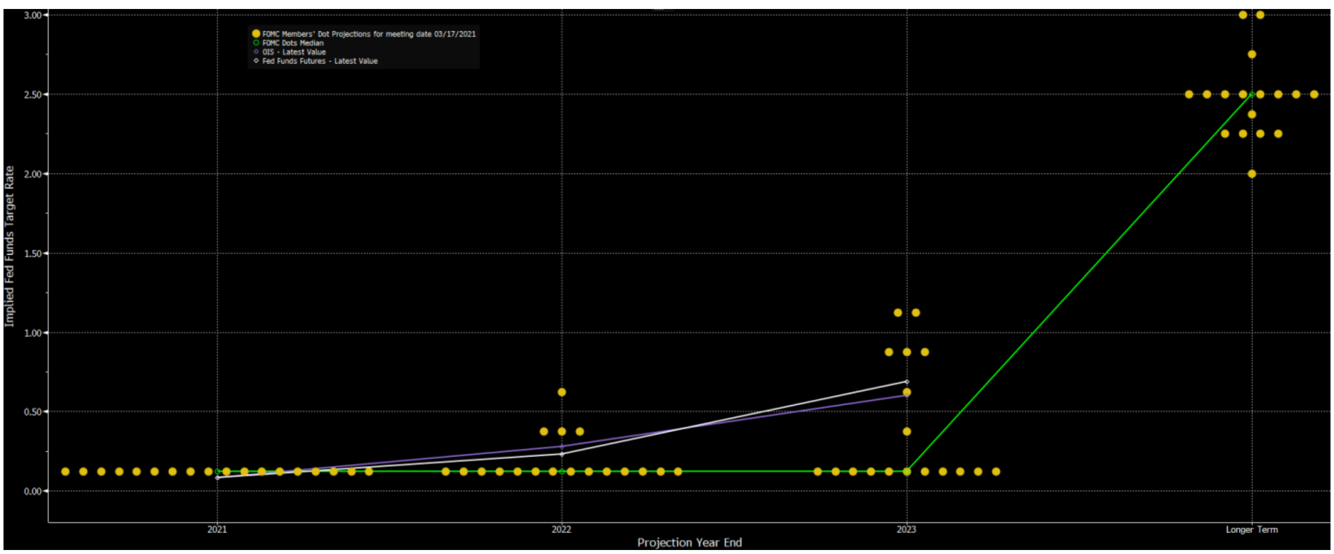
US equities sensitivity to rate hikes

Macroeconomic view

As inflation growth in the US is considerably spiking, markets are focused on understanding how equities and bonds will react to an eventual monetary reaction from the FED. Since the debate seems to persist around whether growth will be permanent or transitory, we decided to calculate the sensitivity of US listed companies to a range of FED rate hikes in the coming two years. Among the many ramifications of a rising cost of leverage, **our question is how much will fundamentals deteriorate and how much will the annual cost of debt rise**. So we look at FED consensus, earnings expectations and current fundamental metrics on debt sustainability.

FED consensus – First of all, it seems there is full consensus for no hikes in 2021, 81% consensus for zero hikes in 2022, 68% consensus for zero hikes in 2023 and strong consensus for the FED target rate to be around 2.50% in the longer term (cryptic definition).

Implied FED funds target rate



Source: Bloomberg

With these projections in mind, we believe the FED is really walking the talk when Chairman Powell mentioned that long-term considerations would rule future monetary policy, instead of the traditional short-term view. That means that a spiking growth – now at 5% – will not necessarily induce a monetary tightening move. The short-term nature of the spiking elements with the CPI calculation are evident, while the long-term ones have barely moved.

Earnings expectations – 2020 was catastrophic for fundamentals in US equities, with an average loss of returns around 40% at is trough (also true for macroeconomic metrics). The bounce back was fast and formidable, with retail demand now higher than in pre-Covid times, a fact also true for Europe and China, but not Japan. People are literally now starting to come back to offices, while various countries are still in a controlled opening phase – and others still altogether closed to foreign travel. Because of the state of current affairs, not all economies are fully back to normal, so fundamentals are still adjusting. Equity analysts have put that into account and into their fundamental forecasts for 2022 and 2023, as per the table below.

Earnings forecasts on major US equity indexes

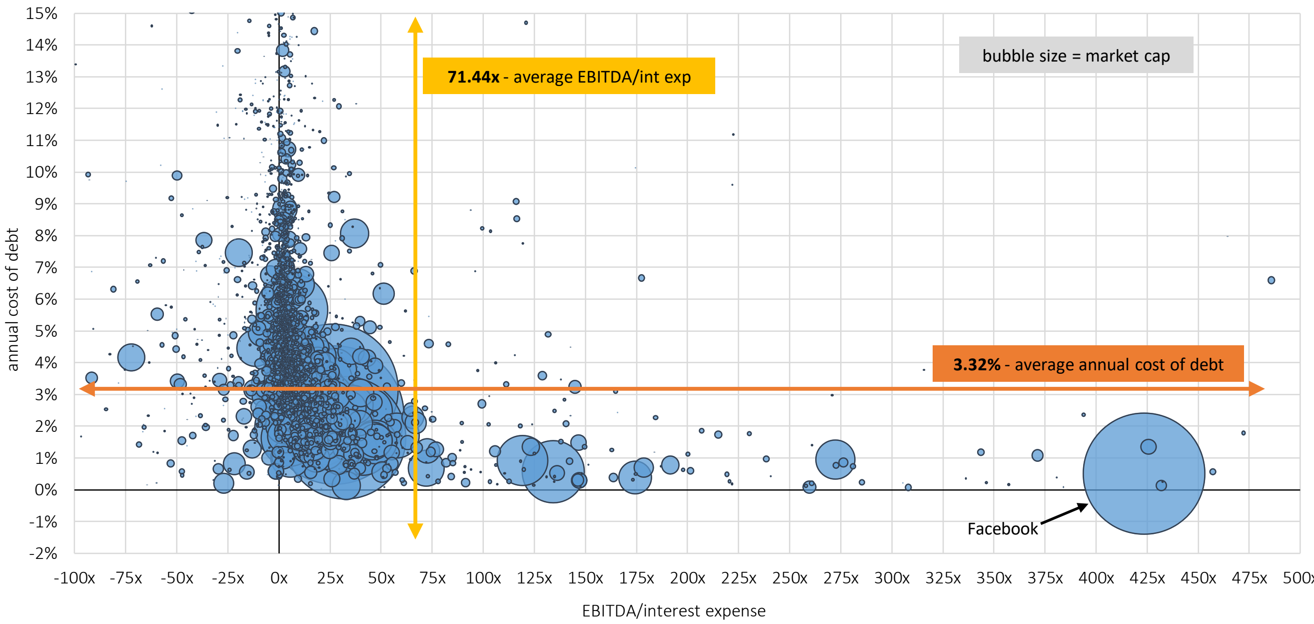
Index	Member companies	Total mkt cap (USD bn)	forward estimated growth								
			From now + 12 months			year 2022			year 2023		
			EBITDA	earnings	cash flow	EBITDA	earnings	cash flow	EBITDA	earnings	cash flow
S&P500	505	37,596	26%	35%	25%	6%	10%	5%	8%	10%	9%
NASDAQ Composite	3,301	23,690	59%	185%	33%	4%	14%	1%	17%	16%	15%
Russell 3000	3,052	46,335	28%	47%	42%	7%	11%	-8%	8%	11%	10%

Source: Bloomberg

According to these numbers, by 2022 the US economy will see some semblance of normality in growth terms. That is a view surely informed by the FED consensus on rate path, among other considerations. EBITDA growth rates of ~5% in 2022 and above 10% in 2023 are to be measured against an increasing cost of debt in our analysis.

Sensitivity to rate hikes – The graph below represent a picture of today's US listed market by 12-month EBITDA over annual interest expense (x axis) and annual cost of debt (y axis). The sample is over 3,000 companies listed in US market exchanges – many companies present in the NASDAQ Composite are also present in the Russell 3000.

Earnings forecasts on major US equity indexes



Source: Bloomberg

The graph translates into the following numbers:

Current EBITDA/ int exp	Sensitivity to FED rate hikes						Current cost of debt	Sensitivity to FED rate hikes					
	0.25%	0.50%	0.75%	1.00%	1.25%	1.50%		0.25%	0.50%	0.75%	1.00%	1.25%	1.50%
71.44x	64.28x	59.24x	55.22x	51.86x	49.00x	46.51x	3.32%	3.56%	3.79%	4.03%	4.26%	4.50%	4.73%
Change	*-10%*	*-17%*	*-23%*	*-27%*	*-31%*	*-35%*	Change	*+7%*	*+14%*	*+21%*	*+28%*	*+35%*	*+42%*

Source: Bloomberg

The situation above is skewed by Facebook's presence, the giant blue circle on the right side of the bubble graph. The company has negligible debt, whose annual cost is about 0.50%. These sample's average numbers remain conservative even when excluding Facebook with its mammoth EBITDA. The EBITDA cushion against a rise in interest rates does not present much of a worry on aggregate level.

However, this picture does not shed light on single macro-industries. So we broke down our sample in 11 industries, where the impact of each potential rate hike is calculated at a single-security level and then aggregated through a market cap weighted average for each industry.

Annual cost of debt

	Current state	Diff with average	Mkt cap weight	FED rate hikes 0.25% (+25bps)	0.50% (+50bps)	0.75% (+75bps)	1% (+100bps)	1.25% (+125bps)	1.50% (+150bps)
Energy	4.53%	36.3%	2.78%	4.78%	5.03%	5.28%	5.53%	5.78%	6.03%
Increase %				*5.52%*	*11.04%*	*16.56%*	*22.08%*	*27.59%*	*33.11%*
Materials	3.80%	14.4%	3.01%	4.05%	4.30%	4.55%	4.80%	5.05%	5.30%
Increase %				*6.57%*	*13.15%*	*19.72%*	*26.30%*	*32.87%*	*39.45%*
Industrials	3.60%	8.2%	9.47%	3.85%	4.10%	4.35%	4.60%	4.85%	5.10%
Increase %				*6.95%*	*13.91%*	*20.86%*	*27.81%*	*34.77%*	*41.72%*
Consumer Discretionary	3.50%	5.3%	13.06%	3.75%	4.00%	4.25%	4.50%	4.75%	5.00%
Increase %				*7.14%*	*14.29%*	*21.43%*	*28.58%*	*35.72%*	*42.86%*
Consumer Staples	2.93%	-11.9%	5.97%	3.18%	3.43%	3.68%	3.93%	4.18%	4.43%
Increase %				*8.54%*	*17.08%*	*25.63%*	*34.17%*	*42.71%*	*51.25%*
Health Care	4.43%	33.2%	13.17%	4.68%	4.93%	5.18%	5.43%	5.68%	5.93%
Increase %				*5.65%*	*11.30%*	*16.95%*	*22.59%*	*28.24%*	*33.89%*
Financials	4.36%	31.3%	11.89%	4.61%	4.86%	5.11%	5.36%	5.61%	5.86%
Increase %				*5.73%*	*11.46%*	*17.19%*	*22.92%*	*28.64%*	*34.37%*
Information Technology	3.04%	-8.4%	25.23%	3.29%	3.54%	3.79%	4.04%	4.29%	4.54%
Increase %				*8.21%*	*16.42%*	*24.64%*	*32.85%*	*41.06%*	*49.27%*
Communication Services	2.61%	-21.4%	9.74%	2.86%	3.11%	3.36%	3.61%	3.86%	4.11%
Increase %				*9.57%*	*19.15%*	*28.72%*	*38.29%*	*47.87%*	*57.44%*
Utilities	3.75%	13.0%	2.31%	4.00%	4.25%	4.50%	4.75%	5.00%	5.25%
Increase %				*6.66%*	*13.32%*	*19.98%*	*26.63%*	*33.29%*	*39.95%*
Real Estate	3.28%	-1.4%	3.37%	3.53%	3.78%	4.03%	4.28%	4.53%	4.78%
Increase %				*7.63%*	*15.25%*	*22.88%*	*30.50%*	*38.13%*	*45.75%*

Source: Bloomberg

Energy, financials and healthcare are the most dependent on debt in our sample, paying an annual cost over 4.40%. The energy and financial sectors are already battered in both fundamental and valuation terms, since energy is fighting a shift towards renewables that are perfectly competitive in price/kwh, while financials have razor-thin margins since rates approached zero in 2020. On top of the usual global players such as Pfizer and Eli Lilly, the healthcare sector is also populated by a very large number of biotech companies that burn cash borrowed by both equity and bond markets in research projects, with a higher cost of debt reflecting higher business risk – similar to mining companies in Australia and Canada. Against the overall average of the sample, energy pays 36% more, healthcare 33% and IT 31%.

Communication services (Google, Facebook, Disney, Netflix, etc.), IT (Apple, Microsoft, Visa, Mastercard, Nvidia, etc.) and consumer staples pay the lowest below or at 3%. In the communication services case, this low cost is the result of the typical infinite operating leverage provided by web-based services, which produces cleaner earnings than brick & mortar businesses based on real and depreciating assets. A similar consideration goes for IT, although not necessarily the same since hardware and human capital intensity is higher. Consumer staples are dominated by the usual giants such as Johnson & Johnson, Procter & Gamble, Coca Cola, Pepsi, Costco, Wallmart. These groups command large market shares in the US and globally, with tight controls over debt and margins. These groups pay 21%, 12% and 8% less than the average cost of debt of the whole sample.

Sensitivities are naturally higher the lower the initial cost of debt, so it is only intuitive that communication services and utilities will be affected more than financials and energy at each rate hike.

From a debt sustainability perspective, the EBITDA/interest expense table below shows strong extremes. As seen in the cost of debt, communication services and consumer staples enjoy either steep operating leverage and/or strong

EBITDAs due to entrenched market positioning. These two advantages afford large easiness in servicing debt, well beyond 20 years of autonomy. Consumer discretionary too enjoys a strong profile, 30% above the aggregate's average value, perhaps due to the high net margins typical of this industry. The situation, in terms of debt sustainability, becomes less comfortable for real estate, utilities and energy with 6, 5 and 4.84 years of autonomy with zero FED rate hike.

EBITDA/interest expense

				FED rate hikes					
	Current state	Diff with average	Mkt cap weight	*0.25% (+25bps)*	*0.50% (+50bps)*	*0.75% (+75bps)*	*1% (+100bps)*	*1.25% (+125bps)*	*1.50% (+150bps)*
Energy	4.84x	-93.2%	2.78%	4.42x	4.08x	3.79x	3.55x	3.35x	3.17x
Decrease %				*-8.70%*	*-15.72%*	*-21.56%*	*-26.51%*	*-30.79%*	*-34.54%*
Materials	25.55x	-64.2%	3.01%	23.26x	21.51x	20.09x	18.89x	17.84x	16.93x
Decrease %				*-8.96%*	*-15.80%*	*-21.37%*	*-26.09%*	*-30.17%*	*-33.75%*
Industrials	11.38x	-84.1%	9.47%	10.41x	9.63x	8.99x	8.44x	7.95x	7.53x
Decrease %				*-8.54%*	*-15.31%*	*-20.98%*	*-25.85%*	*-30.09%*	*-33.83%*
Consumer Discretionary	91.21x	27.7%	13.06%	80.39x	73.08x	67.29x	62.51x	58.47x	55.00x
Decrease %				*-11.86%*	*-19.88%*	*-26.22%*	*-31.46%*	*-35.89%*	*-39.70%*
Consumer Staples	691.38x	867.7%	5.97%	620.57x	567.26x	523.71x	487.06x	455.63x	428.29x
Decrease %				*-10.24%*	*-17.95%*	*-24.25%*	*-29.55%*	*-34.10%*	*-38.05%*
HealthCare	-20.16x	-128.2%	13.17%	-22.24x	-23.72x	-24.91x	-25.91x	-26.76x	-27.50x
Decrease %				*-10.32%*	*-17.65%*	*-23.55%*	*-28.49%*	*-32.72%*	*-36.42%*
Financials	40.93x	-42.7%	11.89%	37.61x	35.18x	33.18x	31.48x	30.01x	28.73x
Decrease %				*-8.12%*	*-14.05%*	*-18.95%*	*-23.10%*	*-26.68%*	*-29.82%*
Information Technology	11.49x	-83.9%	25.23%	10.24x	9.36x	8.65x	8.05x	7.54x	7.10x
Decrease %				*-10.83%*	*-18.49%*	*-24.68%*	*-29.87%*	*-34.32%*	*-38.20%*
Communication Services	157.88x	121.0%	9.74%	130.18x	114.05x	102.82x	94.28x	87.42x	81.72x
Decrease %				*-17.54%*	*-27.76%*	*-34.87%*	*-40.28%*	*-44.63%*	*-48.24%*
Utilities	5.34x	-92.5%	2.31%	5.00x	4.70x	4.43x	4.19x	3.98x	3.79x
Decrease %				*-6.40%*	*-12.02%*	*-16.98%*	*-21.41%*	*-25.38%*	*-28.96%*
Real Estate	6.47x	-91.0%	3.37%	5.95x	5.52x	5.15x	4.83x	4.55x	4.31x
Decrease %				*-7.92%*	*-14.59%*	*-20.29%*	*-25.24%*	*-29.57%*	*-33.41%*

Source: Bloomberg

These industries are not in an ideal situation when rates go up. A reduction of almost 9% occurs when the FED raises by 25 basis points. With the only exception of utilities – often partially owned and heavily regulated by government entities – real estate and energy are at risk of a coup de grâce if rates rise faster than 25bps in the next two years. This is because earnings growth is very far from 9% annually, and the fundamental deterioration could make servicing debt challenging.

Conclusion

As US inflation growth reaches 5% for the month of May, the debate on the nature of this movement remains center-stage in the financial markets.

In the past we observed various times that the elements causing such a spike in inflation growth are short-term in nature. It is also fully dependent on pent-up demand hitting the market after one year of lockdown. More long-term components of the CPI are muted or little changed. In our minds, the main question is not what will the FED do regarding inflation growth, but how will US equities react to a rise in interest rates.

To answer that question, we stress-tested a sample of 3,215 companies out of slightly more than 4,000 US listed companies – we cut out companies with a market capitalization of less than USD 100 million.

The situation is comforting from an aggregate point of view, but a focus on major industries uncovers certain weaknesses should the FED raise rates in the coming two years.

In general, US listed companies seem to enjoy a high level of comfort in servicing their debt from their cash earnings and a controllable amount of leverage. Major US equity indexes – including about 4,000 companies – are expected to produce an aggregate EBITDA growth of about 5% in 2022 and 11% in 2023. A 25bps raise from the FED would produce in our sample an increase in annual cost of debt of about 7% and a 10% reduction in debt sustainability (calculated as EBITDA/interest expense, annually). However, the capability of debt servicing in year terms would still be comfortably high, i.e. much higher than 20 years of autonomy.

Not the same can be said when breaking down the aggregate into main industries. Our analysis shows that consumer staples, communication services and consumer discretionary are in the best shape, i.e. can remain in good health even after a 50% decline in their sustainability profile and a 50% raise in their annual cost of debt. In contrast, real estate, utilities and energy have 6, 5 and 4.84 years of autonomy with zero FED rate hike, respectively. A 25bps raise in rates would produce a 9% decrease in sustainability, which would go down more than 15% with a 50bps raise.

This top-down analysis puts a number to our question of how sustainable US debt is in aggregate terms. When economic decline has already started in some industries, increasingly expensive debt could contribute substantially to bringing old business models to an end. At the same time, technology is revolutionizing many industries, improving returns and decreasing fixed asset intensity. This is surely the case of the energy industry, which is facing a phase out of fossil fuels in favor of green sources. With its low cap rates and the effect of an unprecedented pandemic, the real estate industry can at least count on the value of fixed assets that in specific locations remains at sustained market valuation. Despite its ultra-low margins, utilities can count on government support and will participate in the more or less painful shift in energy sources.

Once these sensitivities become clearer, market valuations will adjust accordingly.

As stock pickers in these exciting times, we continue in our effort to find companies with sustainable economic superiority, which in the last 10 years have only become rarer as the global economy becomes ever more connected.

For further details, please contact:

INDEX & Cie Limited
Index Tower, 20th Floor, East Entrance
Dubai International Financial Center
PO Box 507069, Dubai, UAE
www.indexcie.com

Tommaso Leodari
Chief Investment Officer
Email: tl@indexcie.com

CIO Team
Email: CIOteam@indexcie.com

Disclaimer