Chicago Fed Academic Advisory Council Meeting - Fall 2021

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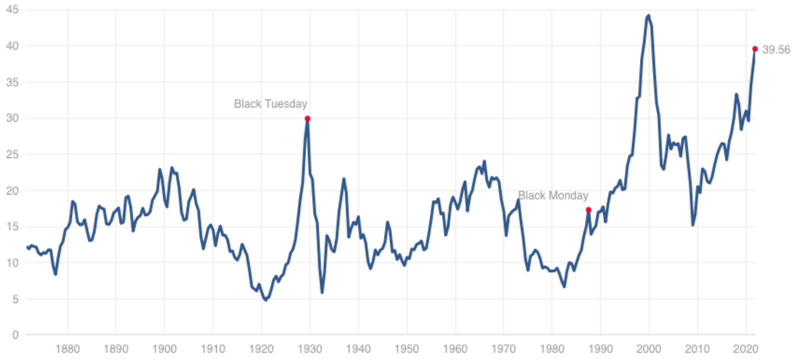
Motivation

The prices of stocks, bonds and real estate, the three major asset classes in the United States, are all extremely high. In fact, the three have never been this overpriced simultaneously in modern history. (Robert Shiller, New York Times, Oct 1 2021)

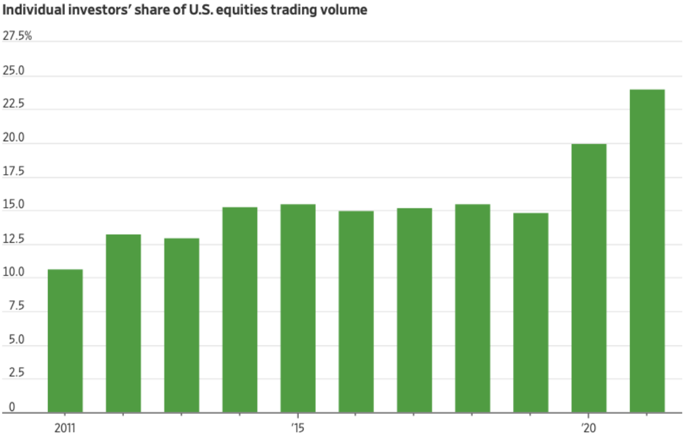
- Quickly review his argument, add to evidence: behavior of covenent-lite loans,
- One *possible* interpretation
  - Low yields on risk-free debt are driving a chase for yield.
  - 'We have to keep on dancing until the music stops'.
- We should give
  - Substantial weight to this possibility in thinking about the evolution of regulatory standards.
  - Some weight to this possibility in thinking about how and when we raise rates.

Figure 1:


45
40
35
30
25
20
15
10
5
0
1880
1890
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020
Black Tuesday
Black Monday
39.56

Coincidence?

Figure 2: Retail buyers and volume

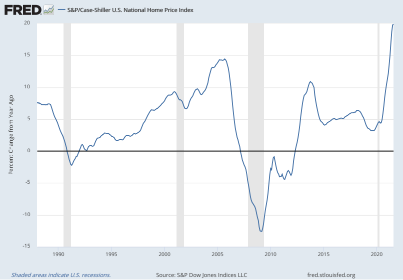


Note: Figures are annual, except for 2021, which represents first-quarter activity.
Source: Bloomberg Intelligence

Housing

- Case-Shiller National Home Price Index rose 19.8 percent, after correcting for inflation, in the year that ended in August.
- Highest 12-month increase since data begin in 1975.
- By this measure, real home prices nationally have gone up 75 percent since February 2012.
- Median time to sell has fallen to one week. In 2015 it was 4 weeks.

Figure 3: Housing price index

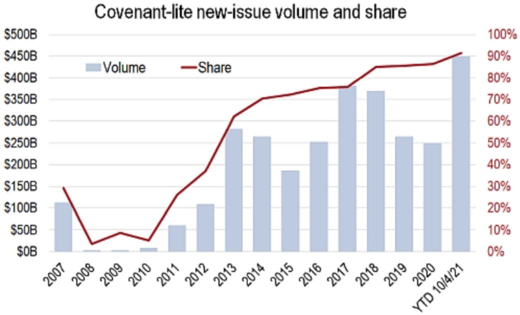


Cov-lite

- More than 90% of U.S. leveraged loans issued this year have been covenant-lite.
- As of Oct. 4, share of covenant-lite loans in the institutional loan market — which includes non-amortizing term debt, the type bought by CLOs — was 91%, the highest level on record.
    - In 2000, covenant-lite loans represented roughly 1% of the market.
- Collateralized Loan Obligation: a single security backed by a pool of debt.
    - typically corporate loans with low credit ratings or loans taken out by private equity firms to conduct leveraged buyouts.

Cov-lite issues

Figure 4:

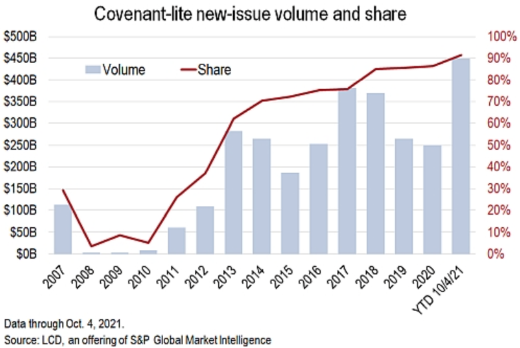


Data through Oct. 4, 2021.
Source: LCD, an offering of S&P Global Market Intelligence

For loans backing LBOs, the share was even greater.

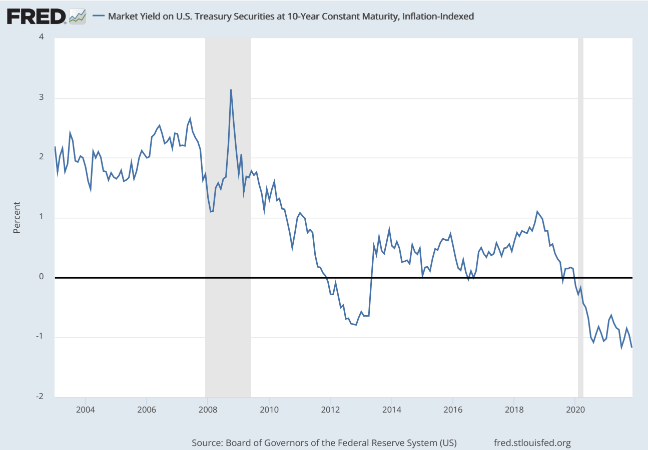
- In an LBO there's usually a ratio of 90% debt to 10% equity (associated biond is‘junk')

Figure 5: Cov Lite LBO's



- More broadly, some 86% of the $1.3 trillion in outstanding U.S. leveraged loans are covenant-lite: a record.

Figure 6: TIPS

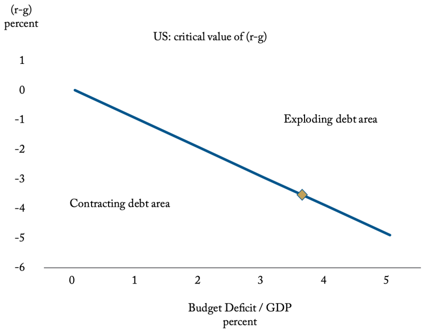


Concerns

- Maybe real factors will keep real interest rates low.
- Ex: the U.S. might get it's fiscal act together.
- Or maybe it won't: see 'Should We Worry About Deficits When Interest Rates Are So Low?', Eichenbaum, (2021).
  - Suppose that $r - g = -0.55$ percent, its average value between 2000 and 2019.
  - U.S. would have to lower budget deficit to about 0.5 percent to keep debt/GDP from exploding.
  - Average value of deficit between 2000 and 2019 was 2.05 percent.
  - Similar story emerges if we consider *ratio of real net interest payments to GDP*.

Fiscal Frontier

Figure 7:



- Given an assumed value for future deficits in the next decade, what is the maximum value of (r - g) such that the ratio of debt-to-GDP ratio doesn't explode?
- This version assumes deficit/GDP is equal to its average value from 2000-2019

Conclusion

- It's entirely possible that my concerns are misplaced.
- But it's easy to think of scenarios where they aren't.
- Regulatory and monetary policy should give those scenarios substantial weight because the downside of those are really big.
- The one I take most seriously is a rise in rates because of fiscal dysfunction in Washington.