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Economics Group

Interest Rate Weekly

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Corporate Finance Part II: Trends in Corporate Leverage

What are the statistical properties of the most familiar corporate financial benchmarks? Once estimated, what do these statistical numbers tell us about actual corporate activity?

Corporate Debt as a Share of GDP

One comment that pervades over economic expansions is that corporate debt is high/low relative to the size of the economy. This series is illustrated in the top graph and exhibits a number of interesting properties. First, the series is not mean reverting and provides evidence of two structural breaks since 1982. One suspects the series is not mean reverting by simply looking at the graph and noticing that the series appears to drift up over time. In this sense, the corporate debt sector is more leveraged today than before, but as we have written before, interest expense as a share of corporate cash flow is lower today than most periods in the past 30 years.

There are two structural breaks in the series. First, in October 1985, there is a shift upward that appears reasonable given the downshift in market rates at the time. Second, there is a downshift in the series in October 2009 which is also reasonable in response to the 2008-2009 recession.

Finally the series is a non-linear series as would be expected by viewing the graph. This makes linear projections of the debt/income ratio immediately inaccurate.

Corporate Leverage: Debt to Equity Ratio

Leverage in the corporate sector is sometimes judged by the ratio of debt to equity as illustrated in the middle graph. First, it is clear that the series is non-stationary and thereby is not mean reverting. While many commentators would like to envision an optimum ratio, the markets do not allow for such a result.

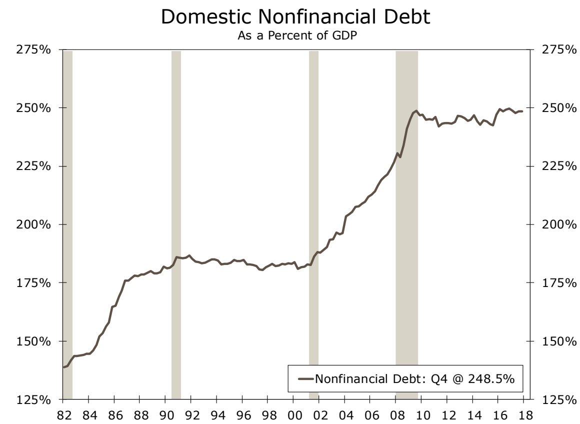
Second, there are several statistically significant breaks in the series. There are two examples of upward shifts—October 1987 and October 2008—both associated with large declines in the equity market.

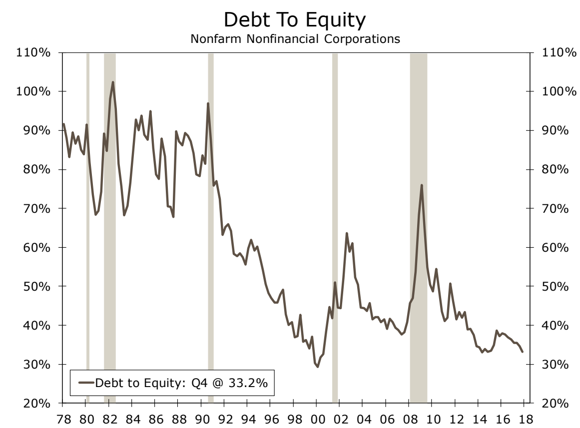
Finally, there is the nonlinear character of the series that one can observe from the graph. There are distinct peaks in the series at or near a recession as the equity market tends to sell off as earnings disappointments increase.

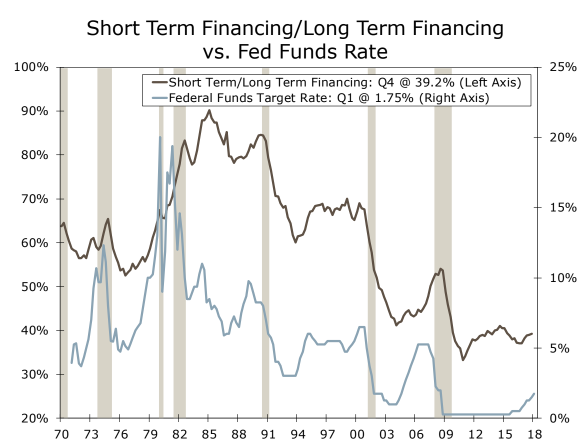
Short-Term versus Long-Term Debt and the Funds Rate

Our work always emphasizes the link between markets. For the ratio of short-term to long-term debt finance, as illustrated in the bottom graph, the interesting observation is that causality runs from the federal funds rate to this ratio and not from this ratio to the funds rate. This would certainly help explain the long downward slope of this series since 1982 that has corresponded with the long-term decline in the funds rate.

This series has a linear trend which opens up the possibility that we can estimate the effect over time of the funds rate on this ratio. It also opens up the possibility that a rising fed funds rate scenario going forward would be associated with a rising short-term/long-term debt ratio—quite a change for the markets going forward.







Source: Federal Reserve Board and Wells Fargo Securities

Wells Fargo U.S. Interest Rate Forecast

	Actual				Forecast							
	2017				2018				2019			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Quarter End Interest Rates												
Federal Funds Target Rate	1.00	1.25	1.25	1.50	1.75	2.00	2.25	2.50	2.50	2.75	2.75	3.00
3 Month LIBOR	1.15	1.30	1.33	1.69	2.05	2.30	2.55	2.80	2.80	3.05	3.05	3.30
Prime Rate	4.00	4.25	4.25	4.50	4.75	5.00	5.25	5.50	5.50	5.75	5.75	6.00
Conventional Mortgage Rate	4.20	3.90	3.81	3.94	4.35	4.37	4.45	4.60	4.72	4.77	4.82	4.87
3 Month Bill	0.76	1.03	1.06	1.39	1.85	2.10	2.15	2.40	2.60	2.65	2.70	2.75
6 Month Bill	0.91	1.14	1.20	1.53	1.95	2.20	2.25	2.50	2.70	2.75	2.80	2.85
1 Year Bill	1.03	1.24	1.31	1.76	2.12	2.25	2.30	2.55	2.75	2.80	2.85	2.90
2 Year Note	1.27	1.38	1.47	1.89	2.32	2.50	2.70	2.92	3.05	3.12	3.19	3.26
5 Year Note	1.93	1.89	1.92	2.20	2.72	2.80	2.88	2.97	3.10	3.17	3.24	3.31
10 Year Note	2.40	2.31	2.33	2.40	2.90	2.95	3.05	3.20	3.32	3.37	3.42	3.47
30 Year Bond	3.02	2.84	2.86	2.74	3.25	3.35	3.45	3.60	3.66	3.70	3.74	3.78

Forecast as of: March 14, 2018

Wells Fargo U.S. Economic Forecast and FOMC Central Tendency Projections

	2018	2019
Change in Real Gross Domestic Product		
Wells Fargo	2.6	2.8
FOMC	2.6 to 3.0	2.2 to 2.6
Unemployment Rate		
Wells Fargo	3.8	3.7
FOMC	3.6 to 3.8	3.4 to 3.7
PCE Inflation		
Wells Fargo	2.1	2.1
FOMC	1.8 to 2.0	2.0 to 2.2
"Core" PCE Deflator		
Wells Fargo	2.0	2.1
FOMC	1.8 to 2.0	2.0 to 2.2

Forecast as of: March 14, 2018

NOTE: Projections of change in real gross domestic product (GDP) and in inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation is the percentage rate of change in the price index for personal consumption expenditures (PCE). Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated.

Fed Data as of: March 21, 2018

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