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Economics Group

Interest Rate Weekly

John E. Silvia, Chief Economist
john.silvia@wellsfargo.com • (704) 410-3275
Harry Pershing, Economic Analyst
harry.pershing@wellsfargo.com • (704) 410-3034

Evolution of the Cost of Capital Over the Business Cycle

Equity capital is one factor in financing economic growth and yet the cost of equity capital varies over the business cycle. In a similar way, bank credit also has a cyclical character.

Who's Steering the Ship?

When evaluating growth patterns over the business cycle, it is useful to examine the underlying components of GDP. As the top graph shows, the composition of our economy continues to evolve over time. Personal consumption expenditures (PCE), which once made up just 61 percent of GDP in 1980, now accounts for nearly 70 percent of our economic output. Interestingly, PCE as a share of GDP has rarely experienced a prolonged decline, even during recessions. This pattern corroborates the notion that the consumer has been driving much of the growth in our current economic expansion. In contrast, business fixed investment (BFI) as a share of GDP exhibits distinct cyclical behavior. This observation makes intuitive sense, as businesses tend to delay new equipment financing and structural development until the economic backdrop becomes more favorable. Financing long-term projects in the midst of economic cyclicality may take on significant risk, which is why business investment is much more responsive to the economic cycle than consumer spending.

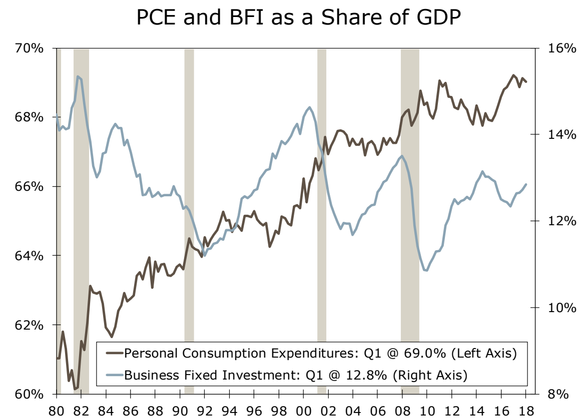
The Price-Earnings Ratio: Another Non Mean-Reverting Series

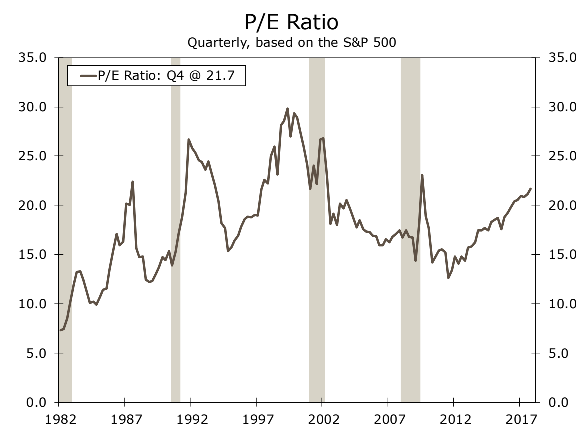
Commentators frequently argue that equity price-earnings ratios are either above or below some average value and that this difference indicates the equity market is under or overvalued. However, as illustrated by the middle graph, an average value can be calculated for any time series, but that does not indicate that the behavior of that series will return to some average value. Mean-reverting behavior for a series cannot simply be assumed.

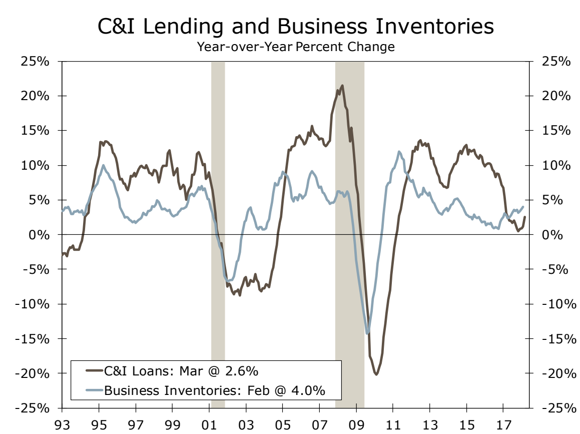
In fact, the P/E ratio is not mean reverting. There have been significant shifts in the series in October 1987 (downward) and in October 1991 (upward) and then down again in July 2002. In fact, the P/E ratio is dependent on the behavior of several economic fundamentals such as expected nominal growth and interest rate polices as well as regulatory changes and exogenous shocks that alter the risk/reward calculus. The P/E ratio is not independent of the economic cycle and, instead, a product of the many economic forces.

C&I Lending: Follow the Leader

Much like BFI, commercial & industrial (C&I) lending and business inventories exhibit pronounced cyclicality. It is also interesting that inventories react *quicker* than C&I lending, tending to rise and fall several quarters before loan activity responds. The leading nature of inventories over C&I loans makes intuitive sense. When emerging from a recession, companies are likely to ramp up production and require larger amounts of inventories. However, companies are likely to refrain from taking out fresh debt to finance the initial buildup, as capital-related wounds are likely still fresh from the economic downturn. Once it is clear that an expansion is underway, C&I lending accelerates and resumes positive growth patterns.







Source: U.S. Department of Commerce, Bloomberg LP 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	2.31	2.35	2.50	2.65	2.65	2.90	2.90	3.15
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	4.44	4.50	4.55	4.70	4.82	4.87	4.92	4.97
3 Month Bill	0.76	1.03	1.06	1.39	1.73	1.95	2.15	2.40	2.60	2.65	2.70	2.75
6 Month Bill	0.91	1.14	1.20	1.53	1.93	2.15	2.30	2.55	2.70	2.75	2.80	2.85
1 Year Bill	1.03	1.24	1.31	1.76	2.09	2.25	2.35	2.60	2.75	2.80	2.85	2.90
2 Year Note	1.27	1.38	1.47	1.89	2.27	2.49	2.67	2.90	3.05	3.12	3.19	3.26
5 Year Note	1.93	1.89	1.92	2.20	2.56	2.86	2.98	3.08	3.20	3.27	3.34	3.41
10 Year Note	2.40	2.31	2.33	2.40	2.74	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	2.97	3.20	3.30	3.45	3.64	3.70	3.74	3.78

Forecast as of: May 9, 2018

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

	2018	2019
Change in Real Gross Domestic Product		
Wells Fargo	3.0	2.6
FOMC	2.6 to 3.0	2.2 to 2.6
Unemployment Rate		
Wells Fargo	3.8	3.6
FOMC	3.6 to 3.8	3.4 to 3.7
PCE Inflation		
Wells Fargo	2.2	2.2
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: May 9, 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

Source: IHS Markit, Bloomberg LP, Federal Reserve Board and Wells Fargo Securities

Wells Fargo Securities Economics Group

Diane Schumaker-Krieg	Global Head of Research, Economics & Strategy	(704) 410-1801 (212) 214-5070	diane.schumaker@wellsfargo.com
John E. Silvia, Ph.D.	Chief Economist	(704) 410-3275	john.silvia@wellsfargo.com
Mark Vitner	Senior Economist	(704) 410-3277	mark.vitner@wellsfargo.com
Jay H. Bryson, Ph.D.	Global Economist	(704) 410-3274	jay.bryson@wellsfargo.com
Sam Bullard	Senior Economist	(704) 410-3280	sam.bullard@wellsfargo.com
Nick Bennenbroek	Currency Strategist	(212) 214-5636	nicholas.bennenbroek@wellsfargo.com
Eugenio J. Alemán, Ph.D.	Senior Economist	(704) 410-3273	eugenio.j.aleman@wellsfargo.com
Azhar Iqbal	Econometrician	(704) 410-3270	azhar.iqbal@wellsfargo.com
Tim Quinlan	Senior Economist	(704) 410-3283	tim.quinlan@wellsfargo.com
Eric Viloria, CFA	Currency Strategist	(212) 214-5637	eric.viloria@wellsfargo.com
Sarah House	Senior Economist	(704) 410-3282	sarah.house@wellsfargo.com
Michael A. Brown	Economist	(704) 410-3278	michael.a.brown@wellsfargo.com
Charlie Dougherty	Economist	(704) 410-6542	charles.dougherty@wellsfargo.com
Jamie Feik	Economist	(704) 410-3291	jamie.feik@wellsfargo.com
Erik Nelson	Currency Strategist	(212) 214-5652	erik.f.nelson@wellsfargo.com
Michael Pugliese	Economist	(212) 214-5058	michael.d.pugliese@wellsfargo.com
Harry Pershing	Economic Analyst	(704) 410-3034	harry.pershing@wellsfargo.com
Hank Carmichael	Economic Analyst	(704) 410-3059	john.h.carmichael@wellsfargo.com
Ariana Vaisey	Economic Analyst	(704) 410-1309	ariana.b.vaisey@wellsfargo.com
Abigail Kinnaman	Economic Analyst	(704) 410-1570	abigail.kinnaman@wellsfargo.com
Shannon Seery	Economic Analyst	(704) 410-1681	shannon.seery@wellsfargo.com
Donna LaFleur	Executive Assistant	(704) 410-3279	donna.lafleur@wellsfargo.com
Dawne Howes	Administrative Assistant	(704) 410-3272	dawne.howes@wellsfargo.com

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