



ZAIS Insights

December 2019

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Interest Rates Still Matter, But Differently.

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- Lower interest rates are less effective than before in spurring investment in the real economy
- Households and banks have cut debt burden, aided by low interest rates
- However, corporations and the government are going in the opposite direction
- This raises the concern that low interest rates and a struggling savings industry may create imbalances and risks that could cause more financial tensions in the next downturn

In the last issue of ZAIS Insight (*How Low Will Yields Fall?*), we argued that the US is unlikely to follow Europe and Japan to zero or even negative interest rates.

Still, interest rates are very low by historical standards and we believe this is unlikely to change anytime soon.

With growth and inflation lower than in any previous cycle, many people wonder whether interest rates still matter (see Table 1).

Table 1: US interest rates, growth and inflation

In % p.a.	10-year yield	Real 10-year yield	Real growth	Inflation
Expansion				
1971-73	6.6	2.8	4.7	3.8
1975-80	8.4	2.7	3.9	7.8
1983-90	9.6	5.0	4.2	4.4
1991-01	6.3	3.2	3.5	2.9
2002-07	4.4	2.0	2.8	2.1
2019-19	2.5	0.2	2.1	1.8

Source: St. Louis Federal Reserve, Philadelphia Federal Reserve¹

In our view, the answer is: yes, they do matter, but differently. Interest rates matter less for the real economy, yet they matter more, financially. This could lead to more imbalances and financial risk taking.

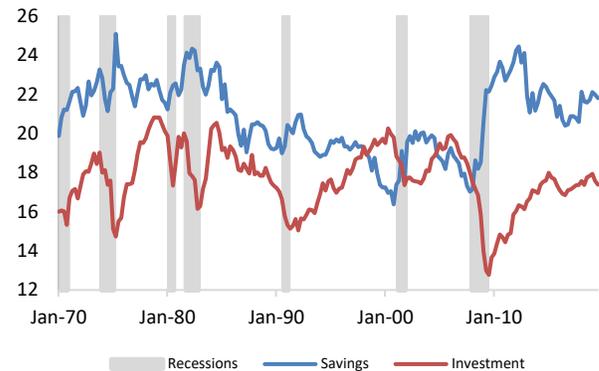
Households and the banking sector are in good shape, but concern is rising over corporate leverage and mounting government debt, which is not being used productively, whilst the savings industry struggles to meet their required returns.

Savings, investment and interest rates

Low interest rates are supposed to stimulate investment and stifle savings. The reality in the current US expansion seems to be the opposite: savings increased and investment declined despite lower real interest rates (see Chart 1).

Chart 1: US private savings and investment

% of GDP



Source: St. Louis Federal Reserve²

Much academic ink has been spilled to explain this paradox. In our view, the main reasons are lower productivity growth, the aging of the population and the deleveraging that followed the financial crisis.

In a way, causality appears to have reversed. The excess of savings over investment seems to us to be depressing interest rates.

Beyond this general observation, the impact of and the response to lower interest rates vary significantly across the different sectors of the economy.

Housing still responds to interest rates

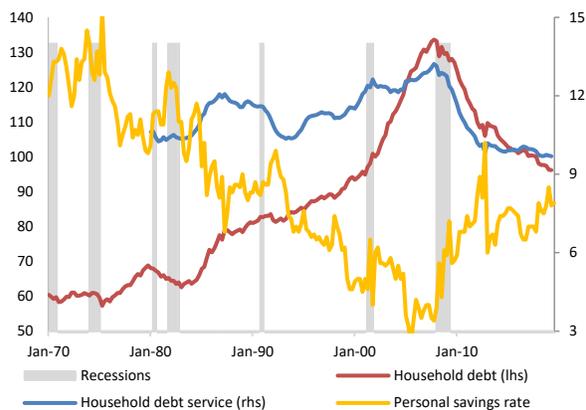
Housing is traditionally one of the most interest rate sensitive sectors of the economy.

At first sight, it appears that housing is responding less to interest rates:

The household sector has invested less in housing and saved more since the financial crisis to reduce the household debt (see Chart 2 below).

Chart 2: US household debt and debt service

% of disposable income

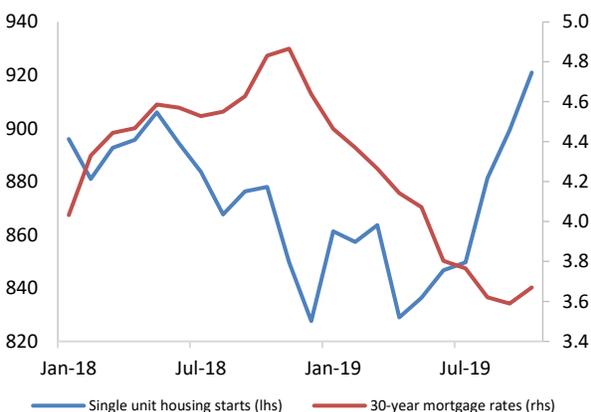


Source: St. Louis Federal Reserve³

However, this does not imply that housing is no longer interest rate sensitive at all. For example, housing activity slowed in 2018 as mortgage rates increased; in 2019, housing activity recovered again as mortgage rates declined (see Chart 3).

Chart 3: US mortgage rates and housing starts

1000 units (lhs) and % p.a. (rhs)



Source: St. Louis Federal Reserve⁴

And households have become healthier

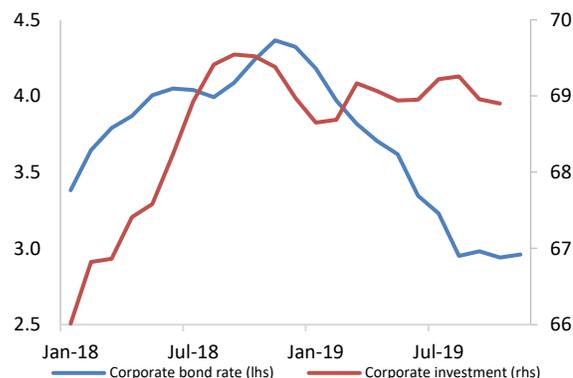
So, while housing remains interest rate sensitive, the household sector has made a big effort to restore its financial health (reduce the debt burden) and the low interest rate environment has facilitated this effort by reducing debt service payments (see Chart 2).

Corporate investment declined

The picture is different for corporations, for which interest rates have less impact on investment decisions. Corporate investment rose in 2018, despite rising interest rates, and stalled in 2019 even though interest rates declined (see Chart 4).

Chart 4: US corporate bond rate and investment

% p.a. (lhs) and \$ billion per month (rhs)



Source: St. Louis Federal Reserve⁵

More broadly, corporates invested less in the current expansion compared with previous cycles even though the corporate sector was initially not over-indebted like the household sector and despite stronger profits and lower interest rates (see Table 2).

Table 2: US corporate investment and financials

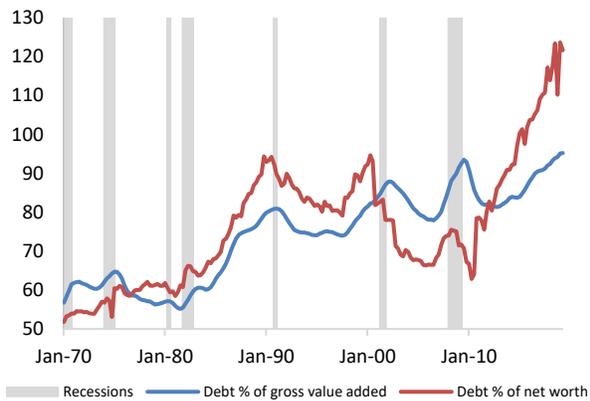
	2001-07	2009-19
Investment (% GVA)	21.3	20.1
Profit margin (% GVA)	15.6	18.9
Real corp. bond rate (%)	2.7	1.9
Earnings yield (%)	3.9	4.1
New equity issues (\$bn p.a.)	222.2	316.4
Equity buybacks (\$bn p.a.)	234.6	368.7
Acquisitions (\$bn p.a.)	262.0	351.5
Net equity issues (\$bn p.a.)	-274.4	-403.8

Source: St. Louis Federal Reserve, Robert Shiller Online Data⁶

But corporate borrowing increased

Yet, corporations, unlike households, are borrowing more. In fact, the falling cost of debt versus the higher cost of equity (earnings yield) has prompted corporations to change their funding mix, increasing the debt load relative to their net worth (see Chart 5).

Chart 5: US corporate debt

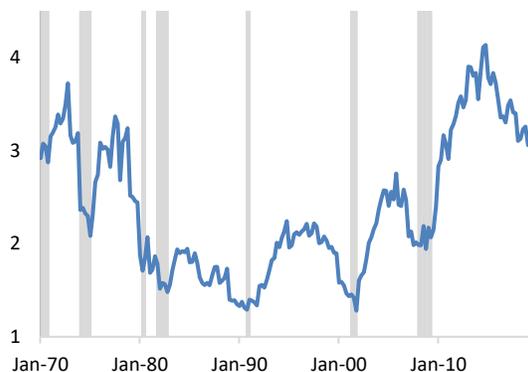


Source: St. Louis Federal Reserve⁷

In other words, corporations find it more attractive to take advantage of the lower cost of debt versus equity and leverage their balance sheets rather than investing in productive capacity. This has resulted in rising equity buybacks and acquisitions, and negative net equity issuance (see Table 2).

Chart 6: US corporate interest coverage ratio

Operating surplus divided by interest payments



Source: St. Louis Federal Reserve⁸

So far, the increased financial leverage has not created serious problems. Although the

interest-coverage ratio is already declining, the overall interest-coverage ratio remains high by historical standards (see Chart 6).

The concern, then, is that this may not apply to all corporations and more may come into difficulties if earnings start to fall.

A big problem for the savings industry

What is tempting for borrowers is increasingly becoming a problem for the savings industry, notably investment funds, pension funds and life insurance companies.

This sector holds assets of around \$50 trillion, which is about 20% of all financial assets in the US economy and roughly half of the assets in the overall financial sector.⁹

So far, fixed income investments have delivered positive returns as the decline in bond yields produced capital gains. But this source of earnings is vanishing as bond yields seem to have reached a bottom.

Lower yields for longer may prompt the savings industry to take more credit, liquidity, duration and other risks to meet their required return targets.

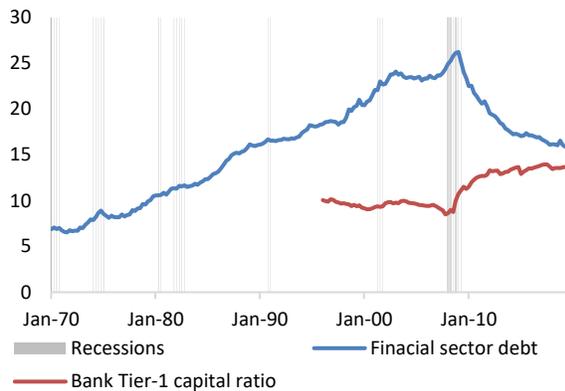
This also means these investors may be less likely to play a stabilizing role in the event of a market crisis. Redemptions could force them to sell less-liquid assets, adding to market tensions.

Banks are doing well despite low rates

The financial sector is key for the intermediation between savings and investments. In the run-up to the financial crisis, the financial sector borrowed heavily to expand its balance sheet.

Since then, the good news is that the financial sector has made significant progress healing its balance sheet, in particular by reducing leverage and increasing bank capital ratios (see Chart 7).

Chart 7: US financial sector debt and capital
% of risk-weighted assets



Source: St. Louis Federal Reserve, Bank of New York Federal Reserve¹⁰

But how is the banking sector coping with low interest rates?

Falling interest rates and a flattening yield curve are typically viewed as negative for interest rate margins.

Indeed, the overall interest rate margin has declined, but not collapsed, and on average stands well above 3% (see Table 3). In fact, interest rate spreads for commercial prime loans, credit card loans and mortgages over bank deposit rates have increased in the current cycle (see Table 3).

Table 3: US bank interest margin and rates

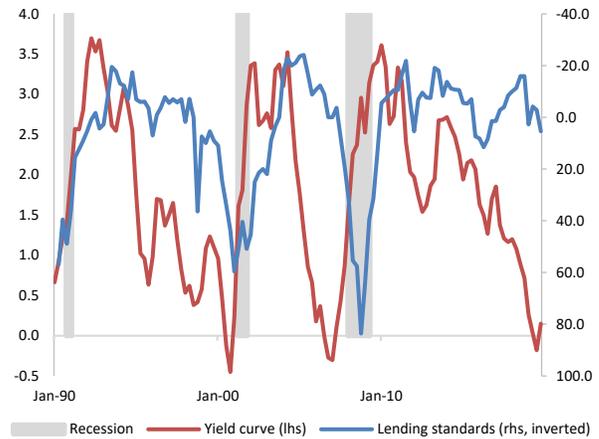
% p.a.	1991-01	2002-07	2009-19
Interest margin	4.2	3.6	3.3
Deposit rate	5.1	3.1	0.2
Prime lending rate	7.9	5.9	3.7
Pers. loan rate	13.8	12.2	10.3
Credit card rate	n.a.	12.9	12.9
Mortgage rate	7.8	6.1	4.1

Source: St. Louis Federal Reserve¹¹

Importantly, banks have not tightened their lending standards despite the flattening of the yield curve (see Chart 8). Thus, while consolidating their balance sheets, banks have not become an obstacle for lending and investment in the low rate environment.

Chart 8: US yield curve & bank lending standard

% p.a. (lhs) and % balance of banks tightening (rhs, inv.)



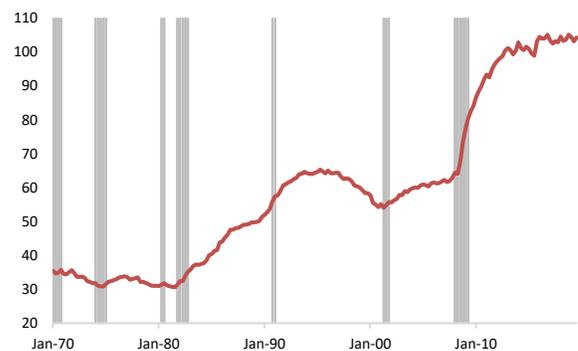
Source: St. Louis Federal Reserve¹²

The government borrows more but invests less

The opposite to the overall savings surplus in the private sector is the US government deficit. The accumulation of deficits has boosted government debt above 100% of GDP (see chart 9).

Chart 9: US Federal government debt

% of GDP



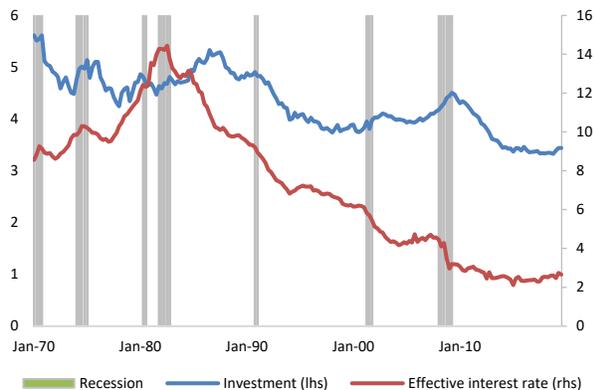
Source: St. Louis Federal Reserve¹³

Yet, while benefitting from the low interest rate environment (the effective interest rate on government debt is about 2 percentage points lower than in the previous cycle), the government is investing less (see chart 10).

We see this as an unfortunate development, given the need for more infrastructure investment to strengthen the growth foundation of the economy.

Chart 10: US government investment and effective interest rate on government debt

% of GDP (lhs) and % p.a. (rhs)



Source: St. Louis Federal Reserve¹⁴

Moreover, as we highlighted in the ZAIS Insight from August 2019 “*Deficits Don’t Matter Until They Do*”, this “unproductive” expansion of the fiscal deficit occurs at a time when the economy is doing well, leaving little fiscal maneuvering room when the economy goes into recession.

Finally, the increased deficit spending and mounting fiscal debt leaves the government vulnerable should interest rates ever rise.

Time is not necessarily healing

As noted above, low interest rates have helped households and the banking sector to heal their balance sheets, but tempted corporations and the government to borrow more without investing more in productive capacity. Moreover, low interest rates tempt both borrowers and investors to take more financial risk.

To be sure, we do not see the US government about to fall into a debt crisis, and the debt accumulation in the corporate sector has probably not yet reached a tipping point as seen before the dot-com or financial crises. Consequently, this cycle may have more time to go, given its tame growth and inflation features.

Low rates for a few more years could mean that current imbalances may well increase further, and new ones may also appear.

Potential deregulation could, for example, tempt households and the banking sector to take on more leverage and risks.

Thus, the longer the cycle and the low interest-rate environment lasts the deeper the next downturn could be.

More information

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¹ 10-year yield is 10-year Treasury yield from Board of Governors of the Federal Reserve System (US), 10-Year Treasury Constant Maturity Rate [GS10], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/GS10>, November 19, 2019.

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