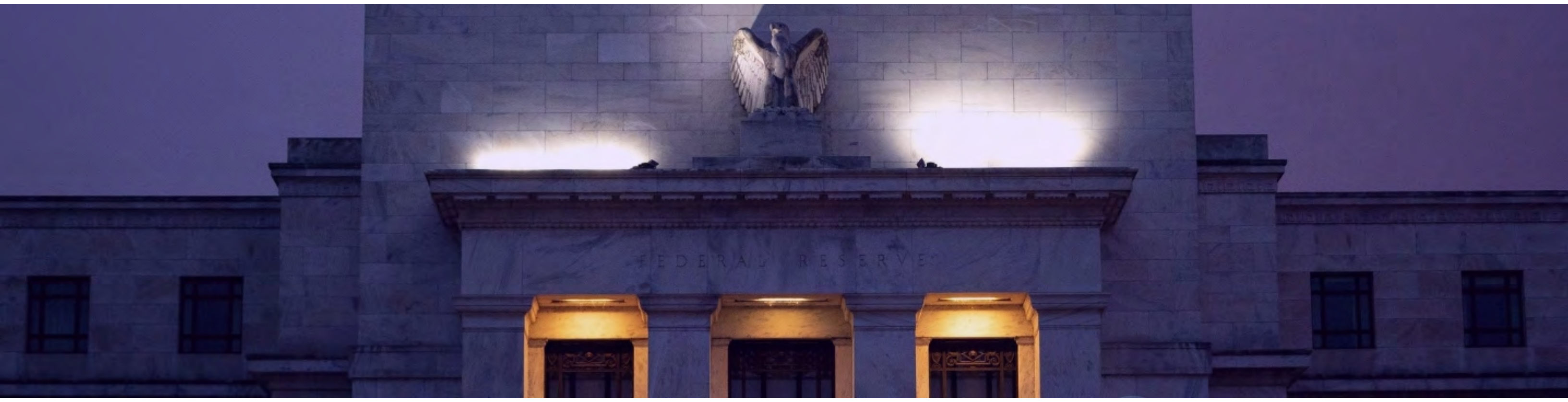


ZAIS Insights

October 2021

Bernhard Eschweiler, PhD
Senior Economic Advisor

Bernhard advises ZAIS on macroeconomic risks and prospects related to credit markets and is a regular contributor to ZAIS Insights.

The Fed is debt constrained

The Fed is debt constrained

- The Fed is caught between inflation control and maintaining financial stability
- The result may be an attempt by the Fed to muddle through …
- … and a shorter business cycle

The last US business cycle, which was ended by the Coronavirus pandemic, was the longest with the lowest real growth and inflation performance since World War Two.[1] The Fed did not have to worry much about inflation and could focus on promoting employment and maintaining financial stability.

In our judgment, the unfolding new economic cycle will be different. We expect no 1970s-style stagflation, but inflation will be higher, in our view. For the Fed, this creates a dilemma.

Responding to higher inflation could destabilize financial markets and, thus, the economy, given high levels of public and private debt. Neglecting price pressures could make the inflation problem worse and encourage public and private borrowers to take on more debt.

We believe the Fed will try to control inflation but may shy away when facing financial instability. The result may be a more volatile and a shorter business cycle.

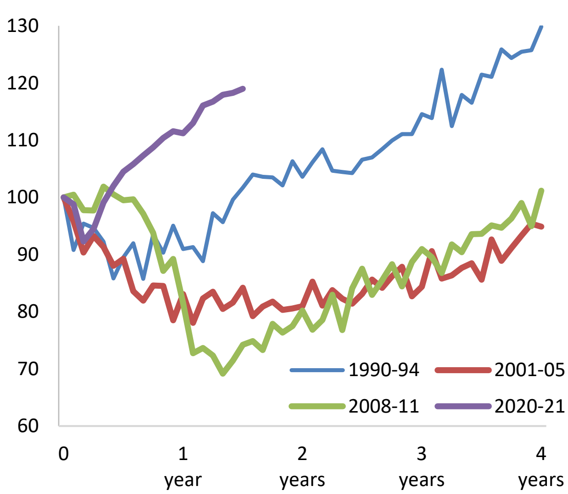
This time is different again

While Corona is not yet fully overcome, the recovery is already leading to a new expansion phase.[2] The Pandemic has triggered some changes that we believe will last (e.g., working from home). More fundamentally, we expect three changes that will differentiate the new cycle from the previous cycle.

- First, we see an investment boom unfolding (see chart 1). In our view, the current surge in investment is not temporary but driven by three lasting forces: Private and public infrastructure needs, new environmental and climate standards, and the advance of the digital economy.

Chart 1: Core capex orders

100 = month before start of recession

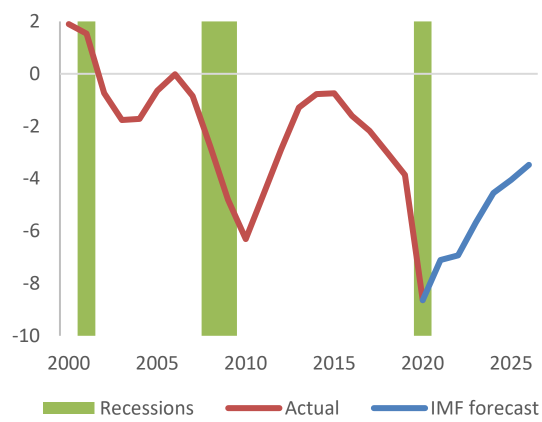


Source: US Census Bureau [3]

- Second, we believe that the tensions between the administration, the Senate and the House of Representatives will not result in serious attempts to consolidate the budget. Similar to the IMF, we believe that the economic recovery will help to reduce the budget deficit, but that the deficit will remain large by past standards (see chart 2).

Chart 2: Structural primary fiscal balance

% % of GDP



Source: IMF [4]

- Third, we think current inflation pressures will moderate and a 1970s-style stagflation is unlikely.[5] However, we see a return to average inflation below 2% as similarly unlikely. We expect inflation to average above 2% in the new cycle with a bias towards 3%. The main reasons, to us, are stronger demand from business investment, private households and the government and tighter labor market conditions (less job participation and more job offers, see chart 3).

Chart 3: Labor participation & job offering

Percent both scales

Source: US Bureau of Labor Statistics [6]

The Fed seems to want to move soon …

The projections from the last FOMC meeting on September 22nd show the Fed is confident that inflation will moderate significantly in 2022.[7] At the same time, the Fed is signaling its intention to begin the process of policy normalization soon.

At the September 22nd meeting, FOMC members projected the first interest rate hike for 2022 (two years earlier than the projections from last March) and Fed Chairman Powell stated at the subsequent Press Conference that a decision to reduce asset purchases (tapering) could be made as early as in the next meeting in November.[8]

… but will the Fed be determined?

We have no doubt that the Fed will start policy normalization soon, but the question is whether the Fed will be determined to maintain price stability under any circumstances. The projections of current FOMC members imply that policy normalization does not require significant tightening: by 2024, the median FOMC member projects a Fed Fund rate of 1.8% with a Personal Consumption Expenditure inflation rate of 2.1%, which implies still negative real interest rates.[9]

These projections could mean the Fed believes that not much has changed and that the US economy will remain stuck in an environment of low growth and inflation with low and even negative real interest rates.

As outlined before, we believe the new cycle will be different. Our expectation of stronger investment, little to no efforts to balance the fiscal budget and higher inflation would imply that interest rates have to rise more than what the Fed is currently projecting.

Financial stability matters more

Perhaps the Fed will tighten more if our outlook is correct. However, we believe that financial stability concerns will make the Fed hesitate. Financially stability is not an official Fed target. In practice, however, we think financial stability matters a lot to the Fed.

Crisis situations like the Great Financial Crisis and the initial shock from the Corona Pandemic have shown that the Fed is willing to do all it can to restore financial stability.

Yet the Fed has become sensitive to financial conditions even in more normal times. A good example is the sudden policy shift at the end of 2018 and early 2019.

At the meeting on September 26th, 2018, FOMC members projected 75 basis points further rate hikes in 2019.[10] At the meeting on December 19th, 2018, the projection of further rate hikes in 2019 was lowered to 50 basis points amid a decline in financial market conditions.[11] Equity markets fell further in the days immediately after the December FOMC meeting[12] and the Fed effectively halted its rate hiking program at the next FOMC meeting on January 30th, 2019, citing tightening in financial conditions.[13]

The debt constraint

Maintaining financial stability is not an end in itself. Rather, maintaining financial stability has become important because of the growing links and feedback loops between the financial sector and the real economy.

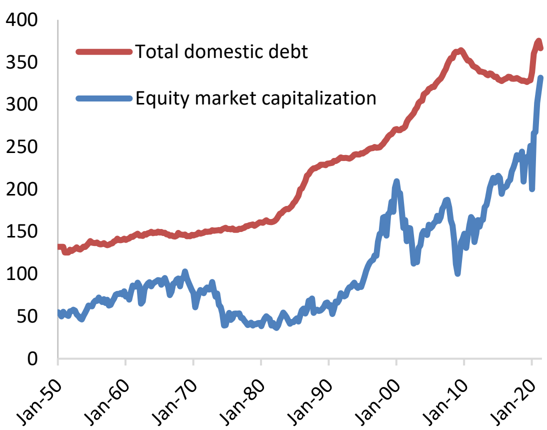
The key link between the financial sector and the real economy is debt. With the rise of debt, financial instability risks having large negative effects on the economy through the unraveling of credit links and conditions as well as defaults.

Another important link is the rising equity market capitalization. Financial instability can create significant negative wealth and balance sheet effects with painful feedback loops for the real economy.

Financial stability was not a primary concern when the Fed tightened policy in the late 1970s and early 1980s to combat inflation. Back then, total debt in the economy was just about 150% of GDP, today it is more than 350% of GDP (see chart 4). Similarly, equity market capitalization was just 40% of GDP, today it is around 330% of GDP (see chart 4, again).

Chart 4: US debt and equity market cap

% of GDP



Source: Board of Governors of the Federal Reserve System and US Bureau of Economic Analysis [14]

The market expects the Fed to stay easy

In our view, financial markets are aware of the financial vulnerabilities of the economy. So far, financial markets seem comfortable with the Fed's policy projections as they do not imply a departure from the low interest rate environment of the last cycle.

This may change quickly, if the Fed signals that it is prepared to tighten more, as was the case in 2018. However, financial markets have also learned that the Fed is likely to pull back when financial conditions deteriorate. By this logic, financial markets may get comfortable that the Fed will never seriously tighten policy and rely even more on easy financing conditions.

And the government hopes so as well

For the government, debt sustainability depends critically on the continuation of the low interest rate environment. The Congressional Budget Office (CBO) currently projects an average 10-year Treasury rate of 2.3% over the next 5 years with real growth and inflation at 2.1% and 2.2% respectively.[15] Under these favorable conditions (nominal growth exceeds interest rates by a large margin), the CBO expects the Federal debt as a share of GDP to remain relatively stable despite a significant primary (non-interest) deficit.[16]

However, the CBO's long-term budget outlook also shows that the debt to GDP ratio will double within 20 years to over 200% if the government fails to reduce the primary deficit and the 10-year Treasury rate gradually rises to 5%.[17] A 10-year Treasury rate of 5% seems high from today's perspective, but was at the low end of the range in the 1970s through the 1990s.[18]

Between a rock and a hard place

It would be wrong to think the Fed will not try to do the right thing. However, the trade-off between inflation control and maintaining financial stability may be very difficult or impossible to overcome.

We believe the Fed will end up with a muddling through approach, shifting priorities between inflation control and maintaining financial stability depending on which side of the problem is acutely bigger. The resulting risk is that more frequent shifts in monetary policy will result in more financial and economic volatility.

One area where the volatility could increase markedly is the yield curve. The yield curve is likely to steepen sharply if the Fed stops buying assets or even unwinds some of its security holdings yet treads carefully on the interest rate side and allows inflation to run higher. On the other hand, any signs that the Fed will be a bit more aggressive in fighting inflation could quickly trigger recession fears and result in yield curve flattening as was the case in late 2018 and early 2019.[19]

In our view, rising financial and economic volatility reduce the life expectancy of the business cycle yet fail to stop the rise of debt in the economy if financial markets do not think the Fed is determined to resist inflation at any price, preserving debt-friendly financing conditions.

More information

As always, we are available to discuss our views with you. Please contact your Client Relations representative at +1 732 978 9722 or zais.clientrelations@zaisgroup.com

---

[1] The previous business cycle lasted 10 ½ years from 2009Q3 through 2019Q and was the longest post WWII with average growth of 2.3% and average inflation of 1.6%.

Federal Reserve Bank of St. Louis, NBER based Recession Indicators for the United States from the Period following the Peak through the Trough [USRECQ], retrieved from FRED, Federal Reserve Bank of St. Louis; October 22, 2021.

https://fred.stlouisfed.org/series/USRECQ

U.S. Bureau of Economic Analysis, Real Gross Domestic Product [A191RO1Q156NBEA], retrieved from FRED, Federal Reserve Bank of St. Louis; October 24, 2021.

https://fred.stlouisfed.org/series/A191RO1Q156NBEA

U.S. Bureau of Economic Analysis, Personal Consumption Expenditures: Chain-type Price Index [PCEPI], retrieved from FRED, Federal Reserve Bank of St. Louis; October 24, 2021.

https://fred.stlouisfed.org/series/PCEP

[2] Third-quarter 2021 real GDP was already 1.4% above the level of the fourth quarter 2019.

U.S. Bureau of Economic Analysis, Real Gross Domestic Product [GDPC1], retrieved from FRED, Federal Reserve Bank of St. Louis; October 28, 2021.

https://fred.stlouisfed.org/series/GDPC1

[3] Board of Governors of the Federal Reserve System (US), Delinquency Rate on Commercial Real Estate Loans (Excluding Farmland), Booked in Domestic Offices, All Commercial Banks [DRCRELEXFACBS], retrieved from FRED, Federal Reserve Bank of St. Louis; July 28, 2021.

https://fred.stlouisfed.org/series/DRCRELEXFACBS

Commercial and Multifamily Mortgage Delinquencies Declined in July; Mortgage Bankers Association; August 5, 2021 and earlier monthly reports.

https://www.mba.org/2021-press-releases/august/commercial-and-multifamily-mortgage-delinquencies-declined-in-july

[4] IMF World Economic Outlook Database, October 2021; US General Government Balances.

https://www.imf.org/en/Publications/WEO/weo-database/2021/October/weo-report?c=111,&s=GGXCNL,GGXCNL_NGDP,GGSB,GGSB_NPGDP,GGXONLB,GGXONLB_NGDP,&sy=2000&ey=2025&ssm=0&scsm=1&scc=0&ssd=1&ssc=0&sic=0&sort=country&ds=.&br=1

[5] In our judgment, the current inflation spike is largely caused by Corona-related distortions: a surge in goods demand replacing services consumption and lockdown-related supply bottlenecks. We believe these distortions will gradually fade with the Pandemic.

[6] U.S. Bureau of Labor Statistics, Labor Force Participation Rate [CIVPART], retrieved from FRED, Federal Reserve Bank of St. Louis; October 16, 2021.

https://fred.stlouisfed.org/series/CIVPART

U.S. Bureau of Labor Statistics, Job Openings: Total Nonfarm [JTSJOR], retrieved from FRED, Federal Reserve Bank of St. Louis; October 17, 2021.

https://fred.stlouisfed.org/series/JTSJOR

[7] The median of FOMC members expects PCE inflation to drop from 4.2% in 2021 to 2.2% in 2022. See Table 1 from FOMC Projection Materials from September 22, 2021. https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20210922.pdf

[8] The median of FOMC members expects the Fed Funds rate to rise from 0.1% in 2021 to 0.3% in 2022. See Table 1 from FOMC Projection Materials from September 22, 2021.

https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20210922.pdf

At the meeting last March, the median of FOMC members projected no increases of the Fed Funds rate in 2022 and 2023. See Table 1 from FOMC Projection Materials from March 17, 2021.

https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20210317.pdf

Chairman Powell said according to the transcript of the Press Conference after the FOMC meeting on September 22, 2021: "So the test for beginning our taper is that we've achieved substantial further progress toward our goals of [2 percent] inflation and maximum employment. And for inflation, we appear to have achieved more than significant progress—substantial further progress. So that part of the test is achieved, in my view and in the view of many others. So the question is really on the maximum-employment test. So if you look at a good number of indicators, you will see that, since last December, when we articulated the test, and the readings today, in many cases more than half of the distance, for example, between the unemployment rate in December of 2020 and typical estimates of the natural rate—50 or 60 percent of that road has been traveled. So that could be substantial further progress. Many on the Committee feel that the "substantial further progress" test for employment has been met. Others feel that it's close, but they want to see a little more progress. There's a range of perspectives. I guess my own view would be that the test—the "substantial further progress" test for employment is all but met. And so, once we've met those two tests, once the Committee decides that they've met [them]—and that could come as soon as the next meeting; that's the purpose of that language, is to put notice out that that could come as soon as the next meeting. The Committee will consider that test, and we'll also look at the broader environment at that time and make a decision whether to taper."

https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20210922.pdf

[9] See Table 1 from FOMC Projection Materials from September 22, 2021. https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20210922.pdf

[10] See Table 1 from FOMC Projection Materials from September 26, 2021

https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20180926.pdf

[11] See Table 1 from FOMC Projection Materials from December 19, 2021

https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20181219.pdf

The S&P500 had dropped about 13% since the start of October 2018 and the FOMC meeting on December 19th.

S&P Dow Jones Indices LLC, S&P 500 [SP500], retrieved from FRED, Federal Reserve Bank of St. Louis; , October 21, 2021.

https://fred.stlouisfed.org/series/SP500

In the press conference after the December 19th FOMC meeting, Chairman Powell said in his official remarks: "Despite this robust economic backdrop and our expectation for healthy growth, we have seen developments that may signal some softening relative to what we were expecting a few months ago. Growth in other economies around the world has moderated somewhat over the course of 2018, albeit to still-solid levels. At the same time, financial market volatility has increased over the past couple of months, and overall financial conditions have tightened—that is, they have become less supportive of growth."

https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20181219.pdf

[12] The S&P500 fell 8% until December 24th, 2018.

S&P Dow Jones Indices LLC, S&P 500 [SP500], retrieved from FRED, Federal Reserve Bank of St. Louis; , October 21, 2021.

https://fred.stlouisfed.org/series/SP500

[13] The FOMC statement said in context of the decision to keep rates on hold: “In light of global economic and financial developments and muted inflation pressures, the Committee will be patient as it determines what future adjustments to the target range for the federal funds rate may be appropriate.”

https://www.federalreserve.gov/monetarypolicy/files/monetary20190130a1.pdf

[14] Board of Governors of the Federal Reserve System (US), Domestic Nonfinancial Sectors; Debt Securities and Loans; Liability, Level [TCMDODNS], retrieved from FRED, Federal Reserve Bank of St. Louis; October 25, 2021.

https://fred.stlouisfed.org/series/TCMDODNS

Board of Governors of the Federal Reserve System (US), Domestic Financial Sectors; Debt Securities and Loans; Liability, Level [TCMDODFS], retrieved from FRED, Federal Reserve Bank of St. Louis; October 25, 2021.

https://fred.stlouisfed.org/series/TCMDODFS

Board of Governors of the Federal Reserve System (US), All Sectors; Corporate Equities; Asset, Market Value Levels [BOGZ1LM893064105Q], retrieved from FRED, Federal Reserve Bank of St. Louis; October 25, 2021.

https://fred.stlouisfed.org/series/BOGZ1LM893064105Q

U.S. Bureau of Economic Analysis, Gross Domestic Product [GDP], retrieved from FRED, Federal Reserve Bank of St. Louis; October 24, 2021.

https://fred.stlouisfed.org/series/GDP

[15] CBO 10-year economic projections July 2021.

https://www.cbo.gov/data/budget-economic-data#1

[16] CBO 10-year budget projections, July 2021.

https://www.cbo.gov/data/budget-economic-data#1

[17] Congressional Budget Office; The 2021 Long-Term Budget Outlook.

https://www.cbo.gov/publication/57038

[18] Board of Governors of the Federal Reserve System (US), Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity [DGS10], retrieved from FRED, Federal Reserve Bank of St. Louis; October 28, 2021.

https://fred.stlouisfed.org/series/DGS10

[19] Federal Reserve Bank of St. Louis, 10-Year Treasury Constant Maturity Minus 3-Month Treasury Constant Maturity [T10Y3M], retrieved from FRED, Federal Reserve Bank of St. Louis; October 25, 2021.

https://fred.stlouisfed.org/series/T10Y3M

Important Information

Confidentiality

The information presented herein has been prepared and provided by and is confidential and proprietary to ZAIS Group, LLC, ZAIS Group (UK) Limited and their affiliates and subsidiaries (collectively, “ZAIS”). Accordingly, this material is not to be reproduced in whole or in part or used for any purpose except as authorized by ZAIS, is to be treated as strictly confidential and is not to be disclosed directly or indirectly to any party other than the recipient. By accepting receipt of this document, the recipient agrees to comply with this restriction and confirms its understanding of the limitations set forth in these disclaimers.

Source of Information

Unless otherwise noted, the source of information for the charts, graphs, and other materials contained herein is ZAIS. The charts, tables, and graphs contained in this document are not intended to be used to assist the reader in determining which securities to buy or sell or when to buy or sell securities. Additional information is available upon request.

Nature of Information Provided

This information has been prepared solely for informational purposes and is not an offer to buy or sell or a solicitation of an offer to buy or sell any security or instrument or to participate in any trading strategy which may or may not be made available. Any such offer of securities would, if made, be made pursuant to definitive final private offering documents, which would contain material information not contained herein (including certain risks) or material that differs from the information contained herein and to which current and prospective investors are referred. Any decision to invest should be made solely in reliance upon such private offering documents. In the event of any such offering, this information shall be deemed superseded, amended and supplemented in its entirety by such private offering documents. Information contained herein does not purport to be complete and is subject to the same qualifications and assumptions, and should be considered by investors only in the light of the same warnings, lack of assurances and representations and other precautionary matters, as disclosed in an applicable private offering memorandum and subscription agreement. No representation or warranty can be given with respect to the terms of any offer of securities conforming to the terms hereof. There is no guarantee that the strategies set forth herein will be successful. The information should only be considered current as at the date specified herein and is subject to change at any time and without notice. Statements made herein that are not attributed to a third party source reflect the views and opinions of ZAIS.

Opinions

Certain information contained herein represents ZAIS's current reasonable opinion and is based on unaudited and forecast figures which have been derived from multiple sources and have not been subject to specific due diligence. The information has been provided in good faith but is not guaranteed and is subject to uncertainties beyond ZAIS's control and should not be relied upon for the purposes of any investment decision. ZAIS makes no representations or warranties and accepts no liability whether in contract, tort or otherwise for (1) the information not being full and complete, (2) the accuracy of any opinion, (3) the basis on which any comparison has been drawn or the facts selected to make such comparison and (4) the assumptions underlying any opinions. ZAIS does not undertake to update its opinions. No opinion of this nature can be, and this information does not purport to be, full, complete, comprehensive or to contain all relevant information. Statements made herein that are not attributed to a third party source reflect the views and opinions of ZAIS.

Forward-Looking Statements

These materials may contain statements that are not purely historical in nature but are “forward-looking statements”. In some cases, you can identify forward-looking statements by terms such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “should” and “would” or the negative of these terms or other comparable terminology. These forward-looking statements include, among other things, projections, forecasts, estimates or hypothetical calculations with respect to income, yield or return, future performance targets, sample or pro forma portfolio structures or portfolio composition, scenario analysis, specific investment strategies or proposed or pro forma levels of diversification or sector investment. These forward-looking statements are based upon certain assumptions, some of which are described herein. Prospective investors are cautioned not to place undue reliance on such statements. No representation is made by ZAIS as to the accuracy, validity or relevance of any such forward-looking statement and the recipient agrees it is solely responsible for gathering its own information and undertaking its own projections, forecasts, estimates and hypothetical calculations. Actual events are difficult to predict, are beyond ZAIS's control, and may substantially differ from those assumed. All forward-looking statements included herein are based on information available on the date hereof or such date specified and ZAIS does not assume any duty to update any forward-looking statement contained herein. Some important factors which could cause actual results to differ materially from those in any forward-looking statements include, among others, the actual composition of the investment portfolio, any defaults to the investments, the timing of any defaults and subsequent recoveries, changes in interest rates, changes in currency rates and any weakening of the specific obligations included in the portfolio. Accordingly, there can be no assurance that estimated returns or projections can be realized, that forward-looking statements will materialize or that actual returns or results will not be materially lower or higher than those presented. The value of any investment, and the income from it, may fall as well as rise. Accordingly, there can be no assurances that an investor will receive back all or any of the original capital invested. Further, the eligible investments may be leveraged and the portfolio of eligible investments may lack diversification thereby increasing the risk of loss.

ZAIS Group (UK) Limited. ZAIS Group (UK) Limited is a company registered in England with number 08908933 and whose registered office is c/o Dixon Wilson, 22 Chancery Lane, London WC2A 1LS, United Kingdom. ZAIS Group (UK) Limited is an appointed representative of Infinity Asset Management LLP, which is authorized and regulated by the Financial Conduct Authority in the United Kingdom. ZAIS Group (UK) Limited's status as an appointed representative of Infinity Asset Management LLP does not imply a certain level of skill or training. Investors will not benefit from the rules and regulations made under the Financial Services and Markets Act 2000 for the protection of investors, nor from the Financial Services Compensation Scheme in the United Kingdom. Nothing herein excludes any liability which ZAIS is not permitted to exclude by applicable law.

Regulatory Registrations and Authorizations. ZAIS Group, LLC's registrations with the Securities and Exchange Commission (the "SEC") and the Commodity Futures Trading Commission (the "CFTC"), and ZAIS Group (UK) Limited's status as an appointed representative of Infinity Asset Management LLP (which is authorized by the United Kingdom's Financial Conduct Authority ("FCA"), does not imply a certain level of skill or training.