

Briefing

Global Economic & Credit Market

Week 50 Ending – December 15, 2023

www.zcg.com

Economic Calendar

- Monday, December 18: Home Builders Confidence
- Wednesday, December 20: Existing Home Sales
- Thursday, December 21: Initial Jobless Claims
- Friday, December 22: New Home Sales

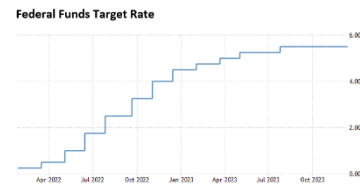
Key Market Metrics

- S&P 500: +2.33% WoW; +22.54% YTD; +20.94% YoY; 13.4x LTM EBITDA; 12.9x NTM EBITDA
- Dow Jones: +2.93% WoW; +12.36% YTD; +12.37% YoY; 10.6x LTM EBITDA; 12.9x NTM EBITDA
- Nasdaq: +2.85% WoW; +41.11% YTD; +37.03% YoY
- Ten Year US Treasury Yield: 3.96% (32) bps YTD; +17 bps YoY
- Currency:
 - British Pound per USD: \$1.27; 1.0% WoW; 4.9% YTD; 4.0% YoY
 - Euro per USD: \$1.09; 1.2% WoW; 1.7% YTD; 2.5% YoY
 - USD per Yen: ¥142.26; (1.9%)WoW; 8.5% YTD; 3.3% YoY
 - Swiss franc per EUR: 1.05 CHF; (0.2%)WoW; 4.3% YTD; 4.0% YoY

U.S. News

■ Federal Funds Target Rate

- Federal Reserve officials left interest rates unchanged at a target rate of 5.25 to 5.5 percent in their final policy decision of 2023 on Wednesday
- The Federal Reserve also forecast that they will cut borrowing costs three times in the coming year, a sign that the central bank is shifting toward the next phase in its fight against rapid inflation
- The interest rate target has now remained unchanged since July



■ Consumer Price Index

- The annual rate of inflation slowed to 3.1% in November from 3.2% in the prior month, matching the lowest level since early 2021
- Core inflation, which has been has remained at 4% for the past several months, was unchanged at 4%, which is still twice as high as the Federal reserve's 2% goal
- The cost of gasoline dropped 6% last month and held down the headline CPI reading

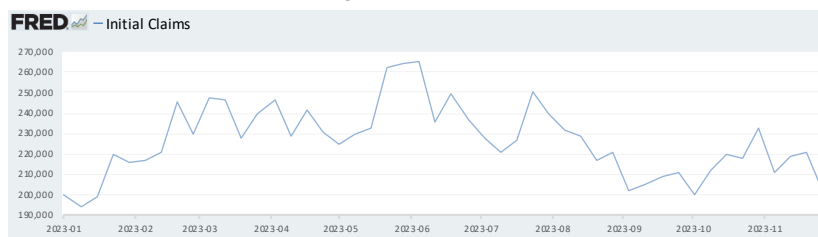


■ Retail Sales

- Sales at U.S. retailers rose 0.3% in November in a good start to the holiday shopping season suggesting the economy might not be cooling off all that much
- Sales particularly surged at internet retailers such as Amazon, as well as stores that sell books, music and other hobby item
- Americans also spent more on clothes, furniture, health-care items and new cars

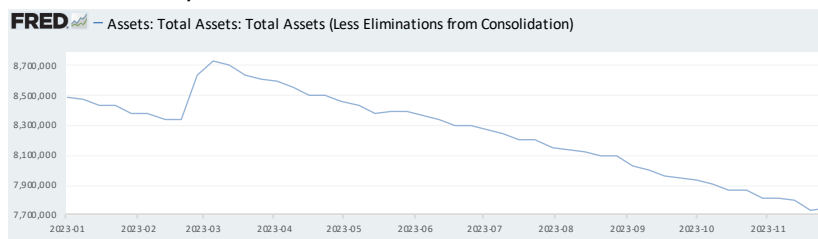
▪ Jobless Claims

- Initial jobless claims, a measure of how many workers were laid off across the U.S., decreased to 202,000 in the week ended December 8, down 19,000 from the prior week
- The four-week moving average was 213,250, down 7,750 from the prior week
- Continuing claims – those filed by workers unemployed for longer than a week – increased by 20,000 to 1.876 million in the week ended December 1. This figure is reported with a one-week lag



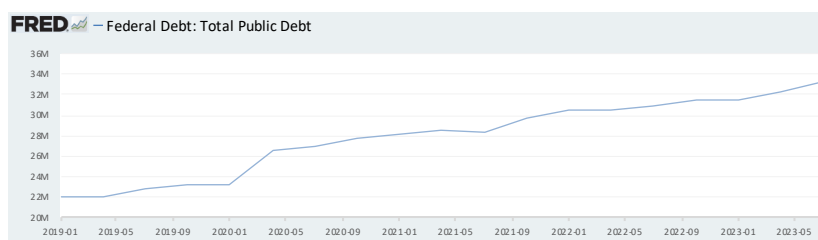
▪ Fed's Balance Sheet

- The Federal Reserve's assets totaled \$7.740 trillion in the week ended December 15, up \$2.2 billion from the prior week
- Treasury holdings totaled \$4.810 trillion, down \$3.1 billion from the prior week
- Holdings of mortgage-backed securities (MBS) were \$2.45 trillion in the week, down \$7.2 billion from the prior week



▪ Total Public Debt

- Total public debt outstanding was \$33.83 trillion as of December 15, an increase of 8.0% from the previous year
- Debt held by the public was \$26.58 trillion, and intragovernmental holdings were \$7.03 trillion

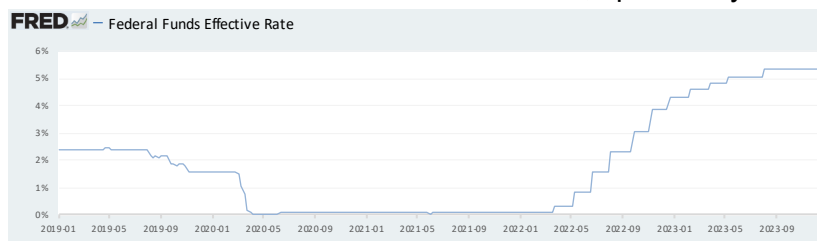


■ Inflation Factors

- CPI:
 - The consumer-price index rose 3.1% in November year over year
 - On a monthly basis, the CPI increased 0.1% in November on a seasonally adjusted basis, after increasing 0.0% in October
 - The index for all items less food and energy (core CPI) rose 0.3% in November, after rising 0.2% in October
 - Core CPI increased 4.0% for the 12 months ending November
- Food & Beverages:
 - The food at home index increased 1.7% in November from the same month a year earlier, and increased 0.1% in November month over month
 - The food away from home index increased 5.3% in November from the same month a year earlier, and increased 0.4% in November month over month
- Commodities:
 - The energy commodities index decreased (5.8%) in November after decreasing
 - The energy commodities index fell (9.8%) over the last 12 months
 - The energy services index 0.7% in November after decreasing (1.0%) in October
 - The energy services index fell (0.1%) over the last 12 months
 - The gasoline index fell (8.9%) over the last 12 months
 - The fuel oil index fell (24.8%) over the last 12 months
 - The index for electricity rose 3.4% over the last 12 months
 - The index for natural gas fell (10.4%) over the last 12 months
- Supply Chain:
 - Drewry's composite World Container Index increased to \$1,521.06 per 40ft
 - Drewry's composite World Container Index has decreased by (28.5%) over the last 12 months
- Housing Market:
 - The shelter index increased 0.4% in November after increasing 0.3% in October
 - The rent index increased 0.5% in November after increasing 0.3% in October
 - The index for lodging away from home decreased (4.5%) in November after decreasing (6.1%) in October

■ Federal Funds Rate

- The effective Federal Funds Rate is at 5.33%, up 1.00% year to date



World News

■ Israel/Middle East

- Residents of the Gaza Strip are facing starvation for the first time in recent history, according to United Nations agencies, as aid deliveries fall short of soaring needs in the enclave, where the food-supply system has collapsed
- Israeli officials said they are ready to double the daily number of aid trucks they process for entry into Gaza, provided international organizations can distribute the increased aid
- The overwhelming majority of Gaza's 2.2 million people don't have enough food, with residents often skipping meals and sometimes going several days without any, according to the World Food Program, a U.N. agency. The U.N. said it is assessing whether Gaza already meets the formal definition of famine, meaning two out of every 10,000 inhabitants die from hunger a day and around one in three children is acutely malnourished

■ Ukraine

- The European Union on Thursday agreed to start membership talks with Ukraine in a major political victory for Zelensky, but the negotiations will take years and it is unclear when they will start. The bloc failed to agree on a long-term package of budget support for the country
- In the U.S., a \$110 billion aid package failed to pass Congress last week, while Hungary on Thursday blocked an EU package for Ukraine worth more than \$50 billion. Ukrainian forces, which are heavily dependent on Western arms, are now running low on ammunition

■ China

- Consumer prices in China fell for the second straight month, a deepening bout of deflation that shows Beijing's efforts to reignite faltering growth are falling short
- China's top leaders telegraphed Friday that more support is coming for the economy, with pledges of new fiscal stimulus and supportive central-bank policy in the months ahead
- Still, the Communist Party signaled that stimulus will be measured rather than aggressive, reinforcing expectations for steady if unspectacular growth in 2024 as the economy grapples with a drawn-out property bust and a global backdrop darkened by war and slowdowns in the U.S. and Europe

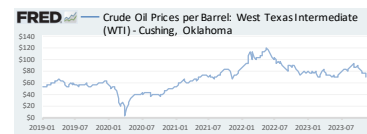
■ Russia

- Russian President Vladimir Putin vowed to press on with his war in Ukraine during an end-of-year audience in which he showed no sign of seeking a swift conclusion to the devastating conflict, saying there would only be peace once Russia had achieved its goals
- For the first time since launching the war, Putin fielded questions from the international media and ordinary Russians for more than four hours on Thursday, in a stage-managed event that cast the president as listening to his people, spotlighted Moscow's invasion of Ukraine and sought to present Russia as resilient to the impacts of the conflict

Commodities

Oil Prices

- WTI: \$71.66 per barrel
 - +0.60% WoW; (9.93%) YTD; (5.85%) YoY
- Brent: \$76.79 per barrel
 - +1.25% WoW; (8.50%) YTD; (5.44%) YoY



US Production

- U.S. oil production amounted to 13.1 million bpd for the week ended December 8, down 0.1 million bpd from the prior week

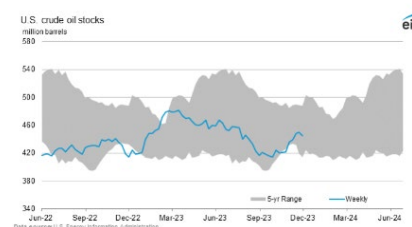
Rig Count

- The total number of oil rigs amounted to 623, down 3 from last week

Inventories

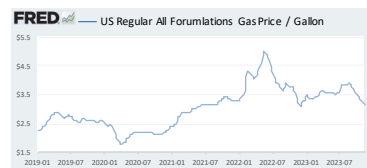
Crude Oil

- Total U.S. crude oil inventories now amount to 440.8 million barrels, up 3.9% YoY
- Refiners operated at a capacity utilization rate of 90.2% for the week, down from 90.5% in the prior week
- U.S. crude oil imports now amount to 7.508 million barrels per day, down (5.1%) YoY



Gasoline

- Retail average regular gasoline prices amounted to \$3.09 per gallon in the week of December 15, down (2.9%) YoY
 - Gasoline prices on the East Coast amounted to \$3.23, down (2.8%) YoY
 - Gasoline prices in the Midwest amounted to \$2.98, down (4.2%) YoY
 - Gasoline prices on the Gulf Coast amounted to \$2.71, down (3.6%) YoY
 - Gasoline prices in the Rocky Mountain region amounted to \$3.01, down (9.9%) YoY
 - Gasoline prices on the West Coast amounted to \$4.27, up 0.3% YoY
- Motor gasoline inventories were up by 0.4 million barrels from the prior week
- Motor gasoline inventories amounted to 224.0 million barrels, up 0.2% YoY
- Production of motor gasoline averaged 9.54 million bpd, up 3.8% YoY
- Demand for motor gasoline amounted to 8.859 million bpd, up 7.3% YoY



Distillates

- Distillate inventories decreased by 1.5 million in the week of December 15
- Total distillate inventories amounted to 113.5 million barrels, down (5.5%)
- Distillate production averaged 4.987 million bpd, down (3.5%) YoY
- Demand for distillates averaged 3.770 million bpd in the week, up 0.1% YoY

○ **Natural Gas**

- Natural gas inventories decreased by 55 billion cubic feet last week
- Total natural gas inventories now amount to 3,664 billion cubic feet, up 7.4% YoY



Geopolitical Hotspots

- **India**
 - An Indian man accused by U.S. authorities of attempting to kill an American Sikh activist has petitioned India's Supreme Court, saying he is a victim of mistaken identity and caught in the middle of political tensions between the U.S. and India
- **Germany**
 - German authorities detained four alleged members of Hamas suspected of planning to attack Jewish institutions in the region—the first suggestion that the Gaza conflict might be spilling over beyond the Middle East
- **Japan**
 - Japan said it had asked the U.S. to suspend all non-emergency V-22 Osprey flights over its territory after one fell into the sea in western Japan. One crew member is confirmed dead with seven missing
- **Indonesia**
 - Indonesia's Mount Marapi volcano erupted on Sunday killing at least 11 climbers, according to the Associated Press. The volcano spewed ash nearly two miles high
- **Spain**
 - Amazon reached an agreement with most of its workers in Spain, averting the full impact of a strike that risked crippling its warehouses on one of the busiest days of the year
- **Italy**
 - Pope Francis is punishing one of his most vocal conservative critics in the Catholic hierarchy, U.S. Cardinal Raymond Burke, by taking away his stipend and rent-free apartment in Rome
- **Argentina**
 - Argentina's newly elected President, Javier Milei, wants to adopt the U.S. dollar as the national currency and strip the central bank's power to print money. The country has been overcome with record inflation and low economic growth

Credit News

High yield bond yields decreased 42bps to 7.82% and spreads tightened 20bps to 375bps. Leveraged loan yields decreased 33bps to 9.25% and spreads decreased 14bps to 541bps. WTD Leveraged loan returns were positive 53bps. WTD high yield bond returns were positive 166bps. Bonds outperformed loans in a market with rapidly falling treasury yields. Benchmark 10yr treasury yields fell 33bps over the last week. Treasury yields reacted to a new set of FED “dots” projections that showed ~80bps of average rate cuts in 2024. The rates market is now pricing a first rate cut in March 2024.

High-yield:

Week ended 12/15/2023

▪ Yields & Spreads¹

Current Week		Prior Week		Δ (bps)	
Yield	Spread	Yield	Spread	Yield	Spread
7.82%	375	8.24%	395	(42)	(20)

▪ Pricing & Returns¹

Pricing			Returns			
Current Week	Prior Week	Δ (bps)	WTD	MTD	YTD	2022
\$91.69	\$90.29	140	1.66%	2.24%	12.44%	-10.55%

▪ Fund Flows²

Total Flows (\$)
\$759mm

▪ New Issue²

Week		YTD		
# New Deals	Total (\$)	Total (\$)	Prior Year YTD	CY vs PY
9	\$5.2bn	\$177.5bn	\$106.5bn	+67%

▪ Distressed Level (trading in excess of 1,000 bps)²

11/30/23	10/31/23	9/30/23
7.80%	8.70%	7.10%

▪ Total HY Defaults

11/30/23	10/31/23	9/30/23
2.08%	1.76%	1.32%

¹ Source: Credit Suisse High Yield and Leveraged Loan Index

² Source: JP Morgan

Leveraged loans:

Week ended 12/15/2023

▪ Yields & Spreads¹

Current Week		Prior Week		Δ (bps)	
Yield	Spread	Yield	Spread	Yield	Spread
9.25%	541	9.58%	555	(33)	(14)

▪ Leveraged Loan Index¹

Pricing			Returns			
Current Week	Prior Week	Δ (bps)	WTD	MTD	YTD	2022
\$94.97	\$94.64	33	0.53%	0.82%	12.19%	-1.06%

▪ Fund Flows²

Total Flows (\$)
\$83mm

▪ New Issue²

Week		YTD		
# New Deals	Total (\$)	Total (\$)	Prior Year YTD	CY vs PY
28	\$23.3bn	\$360.4bn	\$251.9bn	+43%

▪ Distressed Level (loan price below \$80)¹

11/30/23	10/31/23	9/30/23
7.80%	7.20%	6.20%

▪ Total Loan Defaults

11/30/23	10/31/23	9/30/23
2.01%	2.01%	1.90%

Default activity:

- Most recent defaults include: Ligado Networks (\$4.2bn, 11/1/23), Air Methods (\$1.7bn, 10/24/23), WeWork (\$1.6bn, 10/15/23), Rite Aid (\$3.0bn 10/16/23), Mallinckrodt (\$2.8bn 8/28/23), Yellow Corp (\$485mm 8/8/23), Anchor Glass (\$675mm 7/11/23), Instant Brands (\$391mm 6/12/23), Cyxtera Technologies (\$768mm 6/4/23), Diebold (\$2.0bn 6/1/23), Envision Health (\$7.7bn 5/14/23), Venator Materials (\$1.1bn 5/12/23), Bed Bath & Beyond (\$5.2bn 4/22/23), David's Bridal (\$254mn 4/17/23), Monitronics International (\$794mm 4/15/23), Catalina (\$222mn 3/29/23), Diamond Sports (\$8.6bn, 2/15/23), Avaya (\$2.9bn, 2/14/23), Heritage Power (\$485mn, 1/24/23), Serta Simmons Bedding(\$1.9bn, 1/23/23), Party City Holdings (\$1.0bn, 01/17/23), Exela Intermediate (\$1.4bn, 1/15/23)

CLOs:

Week ended 12/15/2023

▪ New U.S. CLO Issuance²

Week of	# Priced	Total (\$)	New Issue	Refis/Resets
12/15/2023	2	\$0.9bn	\$0.0bn	\$0.0bn

▪ New U.S. CLO YTD Issuance²

Total U.S. CLOs	Total (\$)	New Issue	Refis/Resets	Prior Year YTD	CY vs. PY
260	\$112.9bn	\$109.8bn	\$3.1bn	\$128.2bn	-12%

Note: High-yield and leveraged loan yields and spreads are swap-adjusted¹ Source: Credit Suisse High Yield and Leveraged Loan Index² Source: JP Morgan

Ratings activity:

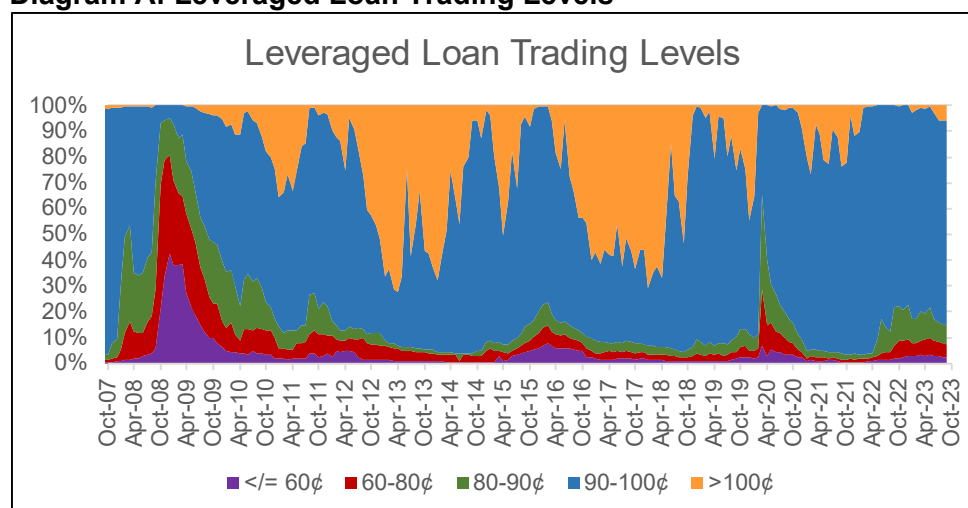
- S&P and Moody's High Yield Ratings

	S&P			Moody's		
	Downgrades	Upgrades	Ratio	Downgrades	Upgrades	Ratio
Full Year 2022	404	314	1.3x	375	312	1.2x
Week Ending 01/06/23	8	2	4.0x	0	0	n/a
Week Ending 01/13/23	12	4	3.0x	12	1	12.0x
Week Ending 01/20/23	8	5	1.6x	8	3	2.7x
Week Ending 01/27/23	2	0	n/a	5	0	n/a
Week Ending 02/03/23	11	13	0.8x	15	22	0.7x
Week Ending 02/10/23	5	6	0.8x	2	1	2.0x
Week Ending 02/17/23	12	7	1.7x	8	1	8.0x
Week Ending 02/24/23	15	7	2.1x	8	10	0.8x
Week Ending 03/03/23	4	8	0.5x	11	17	0.6x
Week Ending 03/10/23	8	10	0.8x	26	5	5.2x
Week Ending 03/17/23	41	9	4.6x	11	8	1.4x
Week Ending 03/24/23	16	4	4.0x	13	4	3.3x
Week Ending 03/31/23	7	4	1.8x	8	6	1.3x
Week Ending 04/06/23	7	5	1.4x	6	1	6.0x
Week Ending 04/14/23	13	12	1.1x	7	5	1.4x
Week Ending 04/21/23	8	8	1.0x	11	5	2.2x
Week Ending 04/28/23	18	4	4.5x	15	4	3.8x
Week Ending 05/05/23	6	4	1.5x	14	7	2.0x
Week Ending 05/12/23	10	5	2.0x	11	5	2.2x
Week Ending 05/19/23	18	5	3.6x	9	2	4.5x
Week Ending 05/26/23	6	2	3.0x	6	1	6.0x
Week Ending 06/02/23	16	8	2.0x	16	5	3.2x
Week Ending 06/09/23	14	7	2.0x	6	2	3.0x
Week Ending 06/16/23	5	3	1.7x	17	5	3.4x
Week Ending 06/23/23	10	4	2.5x	11	4	2.8x
Week Ending 06/30/23	17	6	2.8x	7	11	0.6x
Week Ending 07/07/23	10	6	1.7x	5	3	1.7x
Week Ending 07/14/23	4	2	2.0x	5	13	0.4x
Week Ending 07/21/23	11	2	5.5x	10	9	1.1x
Week Ending 07/28/23	12	2	6.0x	14	5	2.8x
Week Ending 08/04/23	4	8	0.5x	1	4	0.3x
Week Ending 08/11/23	13	10	1.3x	6	8	0.8x
Week Ending 08/18/23	22	4	5.5x	7	3	2.3x
Week Ending 08/25/23	13	9	1.4x	11	6	1.8x
Week Ending 09/01/23	23	14	1.6x	7	4	1.8x
Week Ending 09/08/23	5	4	1.3x	4	5	0.8x
Week Ending 09/15/23	10	4	2.5x	12	8	1.5x
Week Ending 09/22/23	12	12	1.0x	15	6	2.5x
Week Ending 09/29/23	7	10	0.7x	10	5	2.0x
Week Ending 10/06/23	8	9	0.9x	9	14	0.6x
Week Ending 10/13/23	2	4	0.5x	0	1	0.0x
Week Ending 10/20/23	7	4	1.8x	5	4	1.3x
Week Ending 10/27/23	6	2	3.0x	7	7	1.0x
Week Ending 11/03/23	9	5	1.8x	14	7	2.0x
Week Ending 11/10/23	7	5	1.4x	6	4	1.5x
Week Ending 11/17/23	10	7	1.4x	16	7	2.3x
Week Ending 11/24/23	11	8	1.4x	6	8	0.8x
Week Ending 12/01/23	2	4	0.5x	1	4	0.3x
Week Ending 12/08/23	11	5	2.2x	20	5	4.0x
Week Ending 12/15/23	14	4	3.5x	20	6	3.3x
YTD 2023	530	296	1.8x	474	281	1.7x

Source: Bloomberg

Appendix:

Diagram A: Leveraged Loan Trading Levels



Source: Credit Suisse Leveraged Loan Index

Diagram B: High Yield and Leveraged Loan LTM Price

High Yield and Leveraged Loan Data [1]				
	LTM Price			
	Avg. Price	High [2]	Low [3]	LTM High vs. Low Δ
High Yield	87.6	91.7	85.2	6.5
Leveraged Loans	93.6	95.2	91.9	3.3

[1] Data is from Credit Suisse High Yield Market Index and Credit Suisse Leveraged Loan Index

[2] HY high price as of 12/14/23. LL high price as of 9/19/23

[3] HY low price as of 12/29/22. LL low price as of 12/30/22

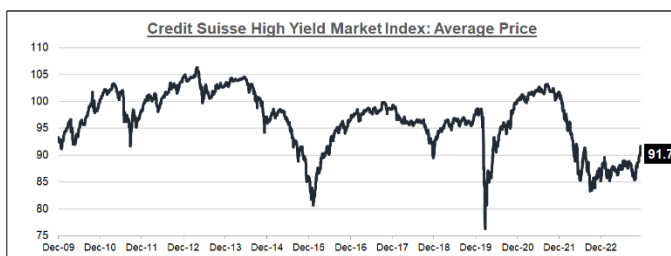
Diagram C: Leveraged Loan and High Yield Returns

Leveraged Loan and High Yield Returns					
	Leveraged Loan Indices		High Yield Indices		
	Credit Suisse [1]	S&P/LSTA [2]	Credit Suisse [1]	S&P [2]	
Weekly Return	0.53%	0.44%	1.66%	1.87%	
MTD Return	0.82%	0.77%	2.24%	2.32%	
YTD Return	12.19%	12.19%	12.44%	10.30%	

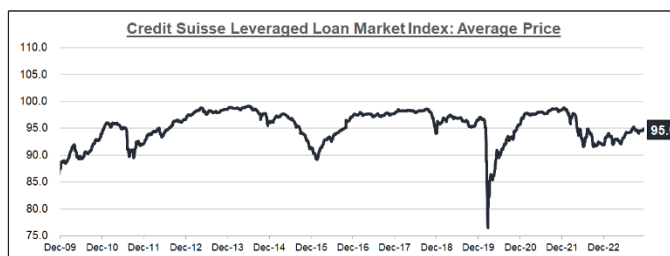
[1] Credit Suisse Total Return information is calculated weekly. Yield data is as of 12/15/2023

[2] Yield data as of 12/15/2023

Diagram D: Average Bid Price of High Yield Bonds & Loans

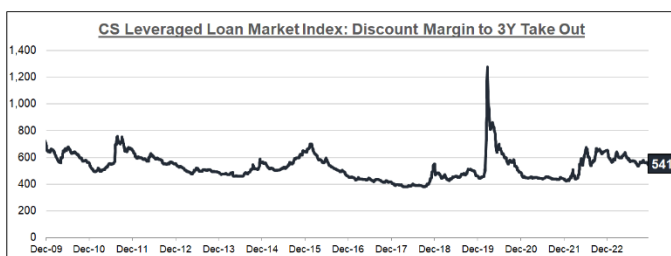


Source: CSFB High Yield Index (formerly DLJ High Yield Index) Average Price, expressed as a % of par value. Data is reported daily.



Source: CSFB Leveraged Loan Index Average Price, expressed as a % of par value. Data is reported daily.

Diagram E: Leveraged Loans Spreads & Yields

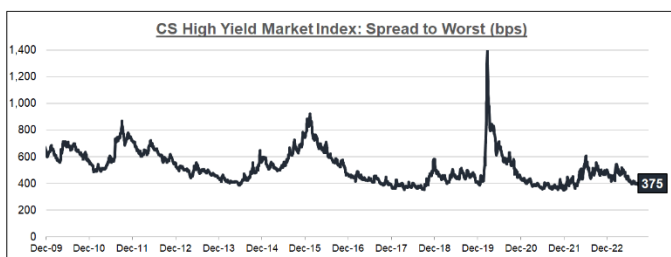


Source: CSFB Leveraged Loan Index Discount Margin to 3Y take-out, expressed in basis points. Data is reported daily.



Source: CSFB Leveraged Loan Index Yield to 3Y take-out, expressed as a percentage. Data is reported daily.

Diagram F: High Yield Bonds Spreads & Yields

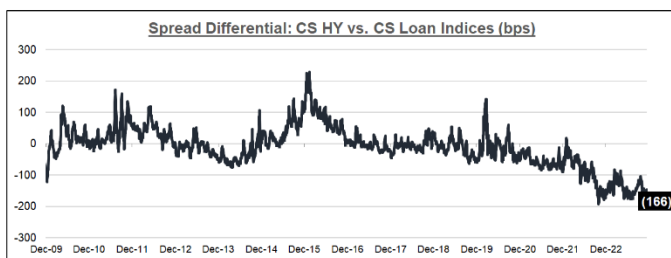


Source: CSFB High Yield Index (formerly DLJ High Yield Index) Spread-to-Worst, expressed in basis points. Data is reported daily.

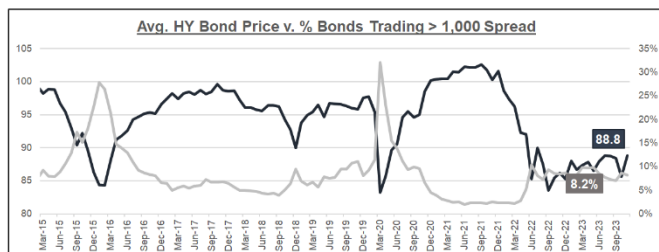


Source: CSFB High Yield Index (formerly DLJ High Yield Index) Yield-to-Worst, expressed as a percentage. Data is reported daily.

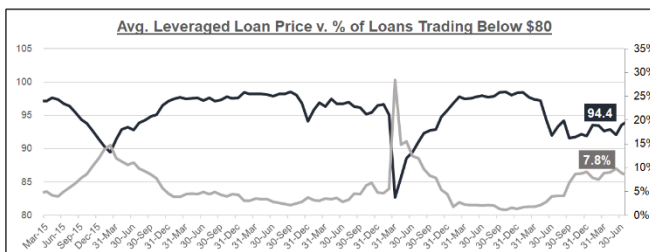
Diagram G: Spread between High Yield Bonds and Leveraged Loans



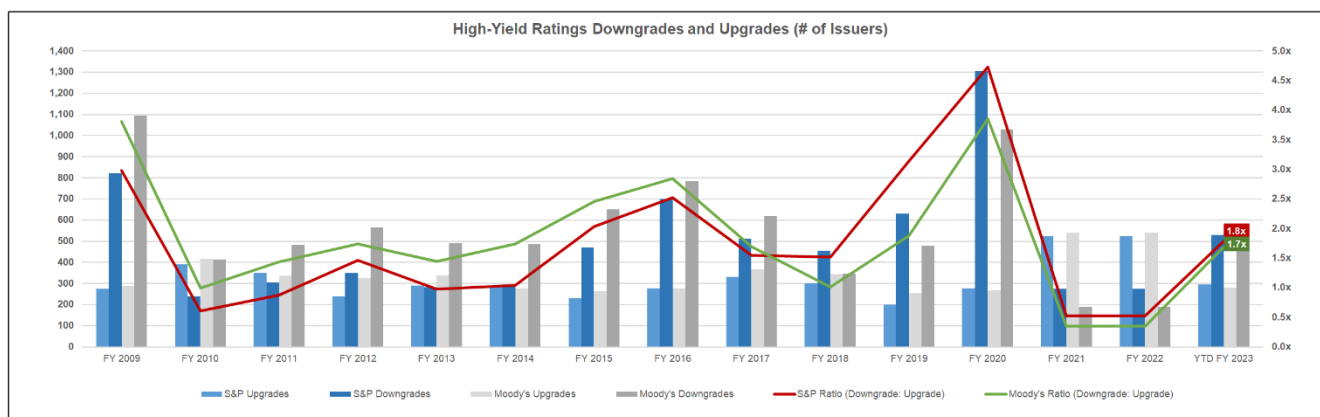
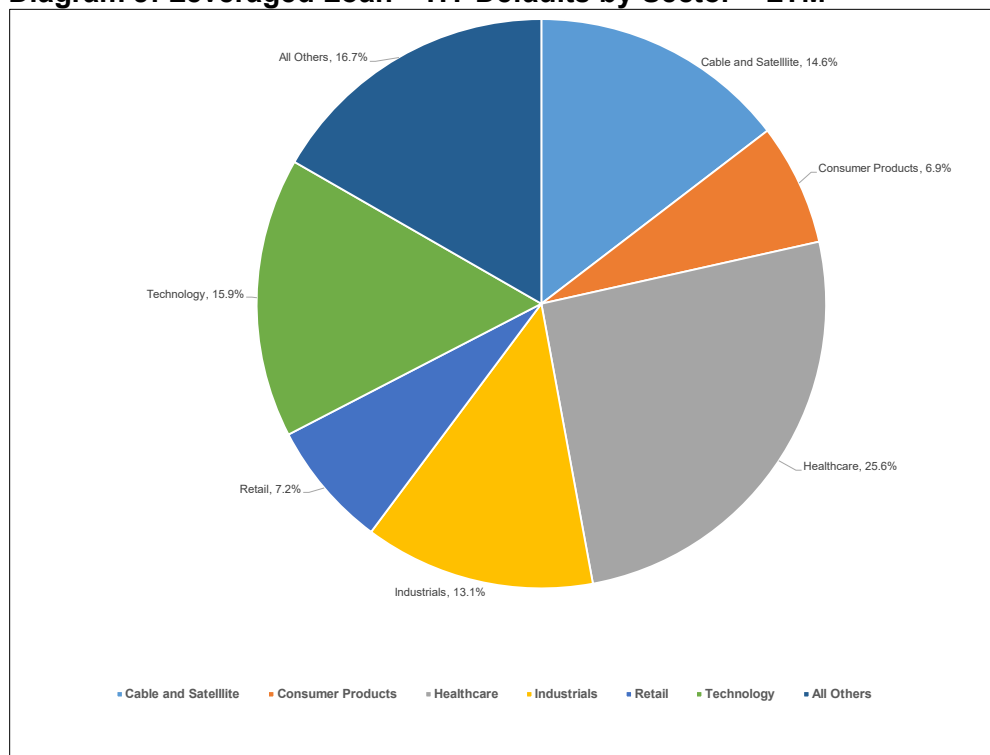
Source: CSFB HY Index and CSFB LL Index. Data is reported daily.

Diagram H: Percentage of Leveraged Loan and High Yield Market Trading at Distressed Levels

Source: CSFB. Data is reported monthly.



Source: JPM. Data is reported monthly.

Diagram I: High Yield Upgrades and Downgrades**Diagram J: Leveraged Loan + HY Defaults by Sector – LTM**

Source: JP Morgan Default Monitor.

Diagram L: CLO Economics

CLO Economics								
AAA Coupons	AAA DMs	WAC Liabilities	DM Liabilities	Leverage	Asset WAS	All In WAS [1]	IRR est.	Cash on Cash est.
L+135-150	L+135-150	L+200-240	L+220-280	9-11x	L+300-360	L+330-390	9-12%	10-14%

*Assumptions: 2% Default / 65% Recovery / 4 year Reinvestment Period

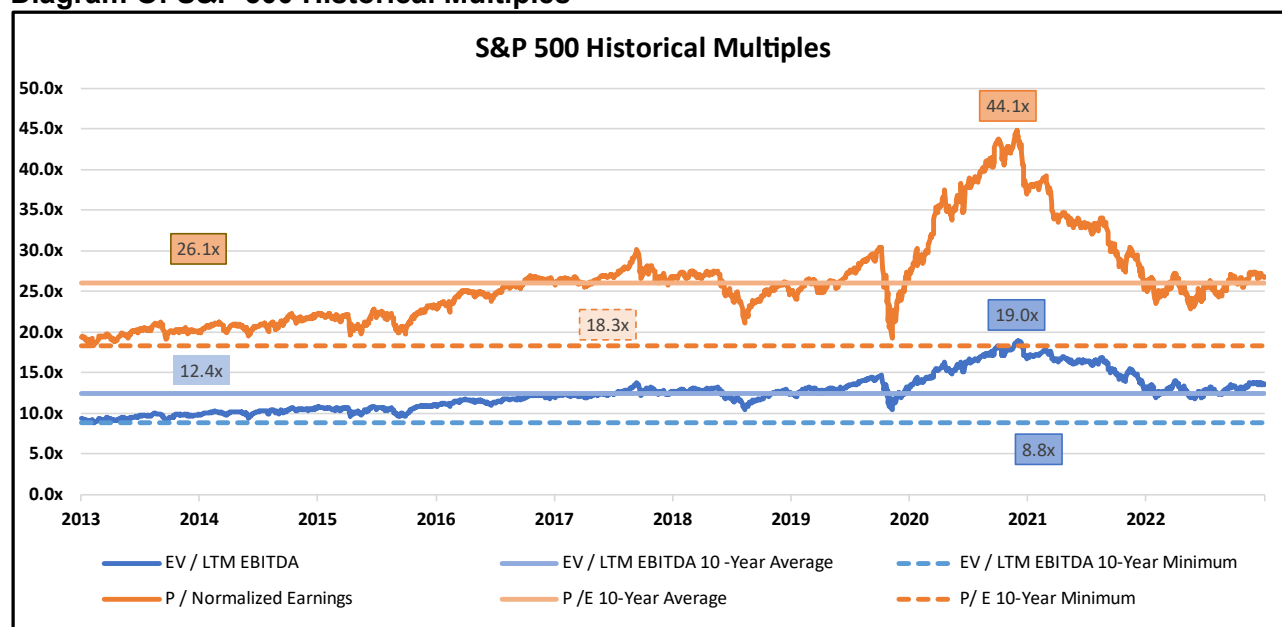
[1] Spread includes OID benefit based on 4 year repayment

Diagram N: Developed Country GovBond Yields (%)

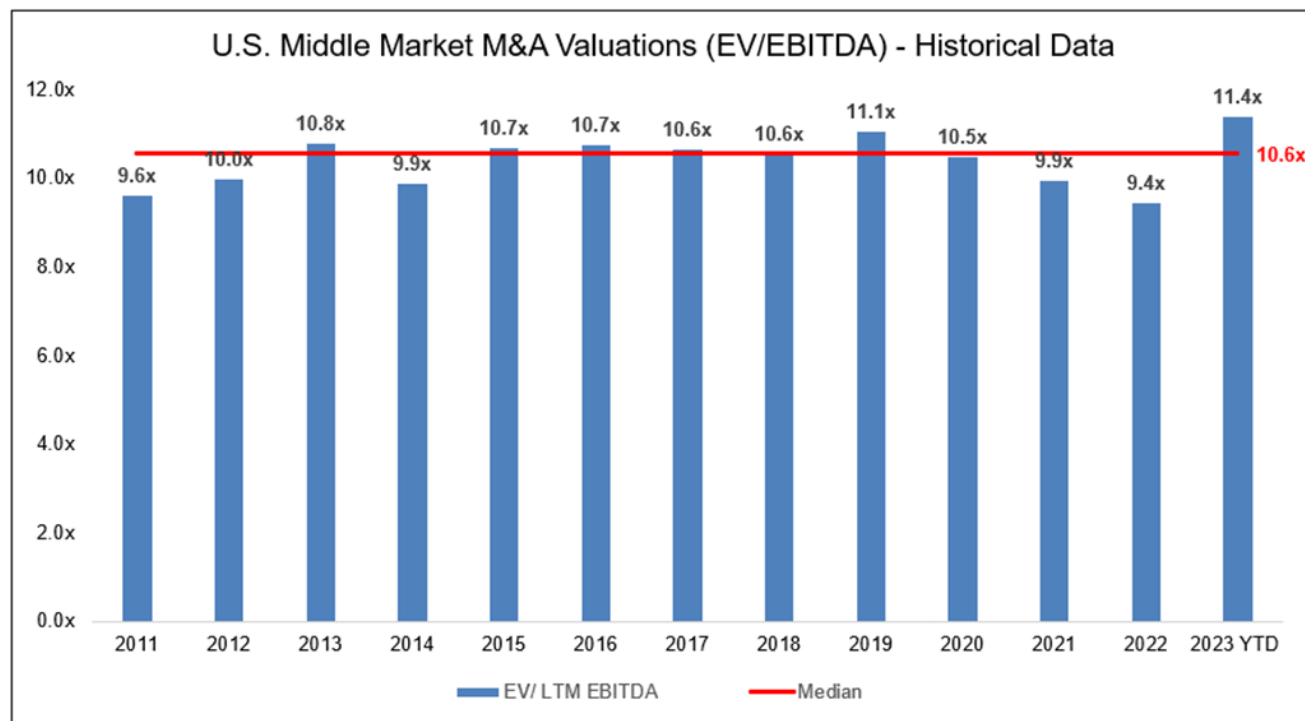
By	11/24/23	12/1/23	12/8/23	12/15/23	Weekly	Q4 2022	Q3 2022	Q2 2022	Q1 2022
France - 10 year	3.20%	2.93%	2.83%	2.55%	(28 bps)	40 bps	80 bps	94 bps	78 bps
Germany - 10 year	2.64%	2.36%	2.28%	2.02%	(26 bps)	46 bps	77 bps	79 bps	73 bps
Italy - 10 year	4.40%	4.10%	4.07%	3.72%	(35 bps)	20 bps	126 bps	123 bps	87 bps
Japan - 10 year	0.78%	0.70%	0.77%	0.70%	(7 bps)	18 bps	1 bps	1 bps	15 bps
UK - 10 year	4.28%	4.14%	4.04%	3.69%	(35 bps)	(87 bps)	211 bps	75 bps	72 bps
US									
US - 2 year	4.95%	4.54%	4.72%	4.44%	(28 bps)	15 bps	133 bps	62 bps	160 bps
US - 5 year	4.49%	4.12%	4.24%	3.91%	(33 bps)	(9 bps)	105 bps	58 bps	120 bps
US - 10 year	4.47%	4.20%	4.23%	3.91%	(31 bps)	5 bps	82 bps	67 bps	83 bps
US - 30 year	4.60%	4.39%	4.30%	4.01%	(29 bps)	19 bps	59 bps	74 bps	54 bps

Source: Bloomberg

Diagram O: S&P 500 Historical Multiples



Source: S&P Capital IQ

Diagram P: U.S. Middle-Market M&A Valuations (EV/EBITDA)

Source: Pitchbook

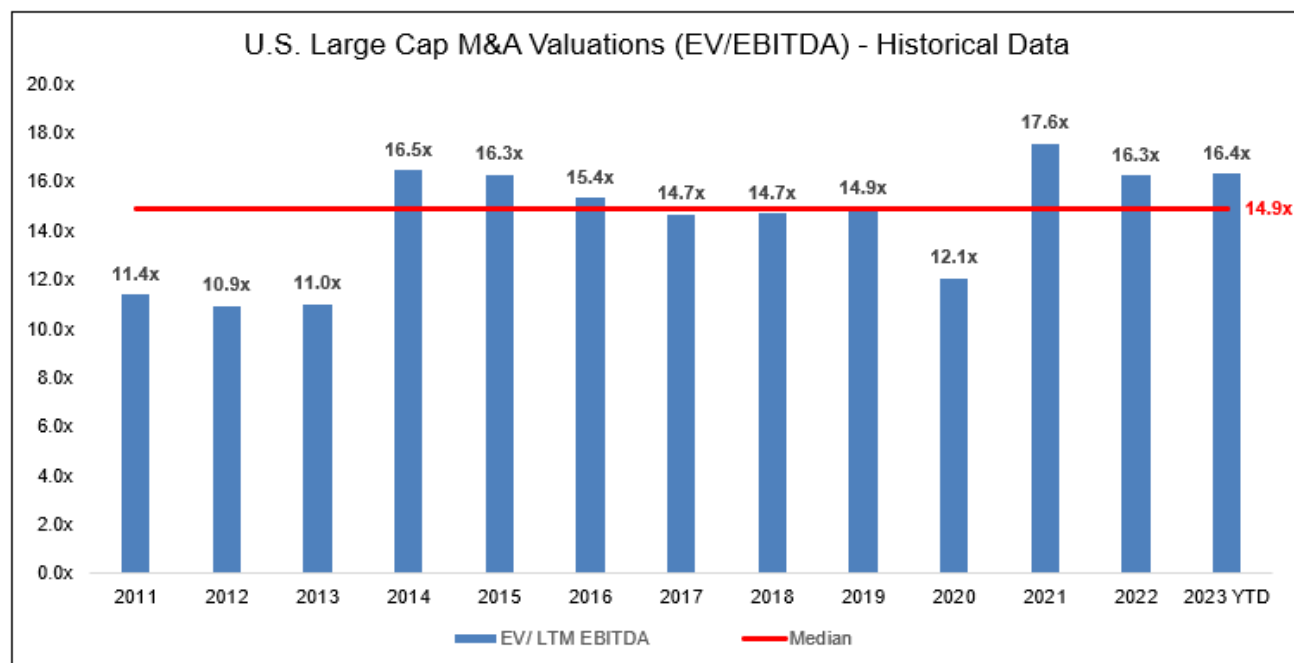
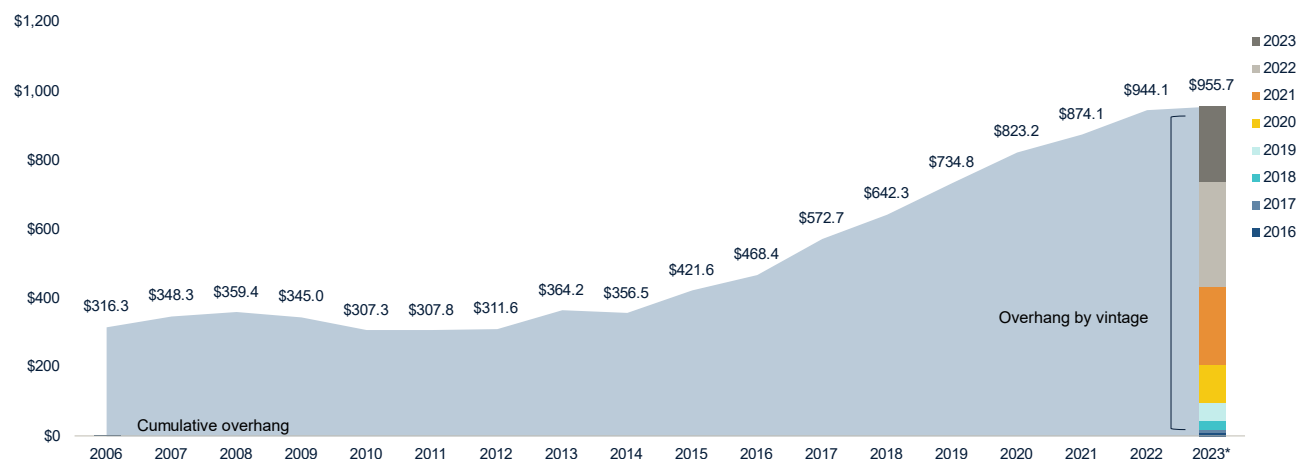
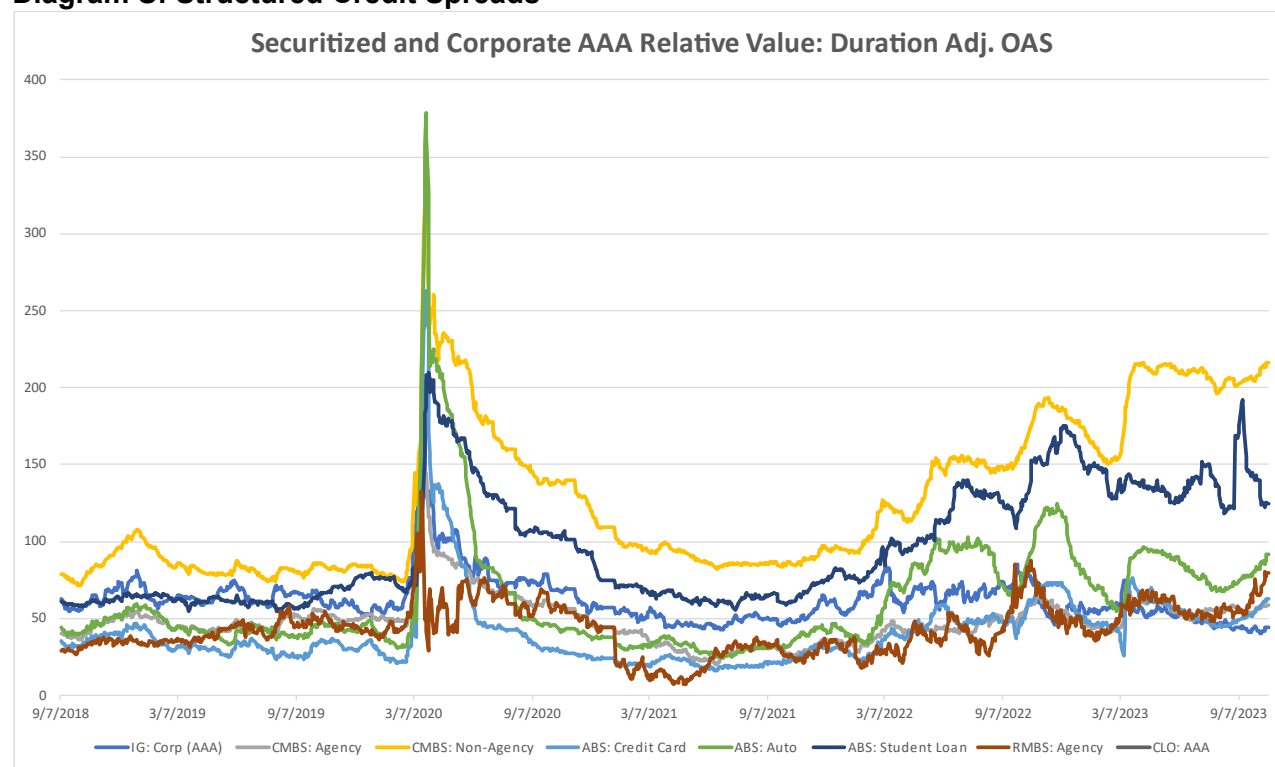
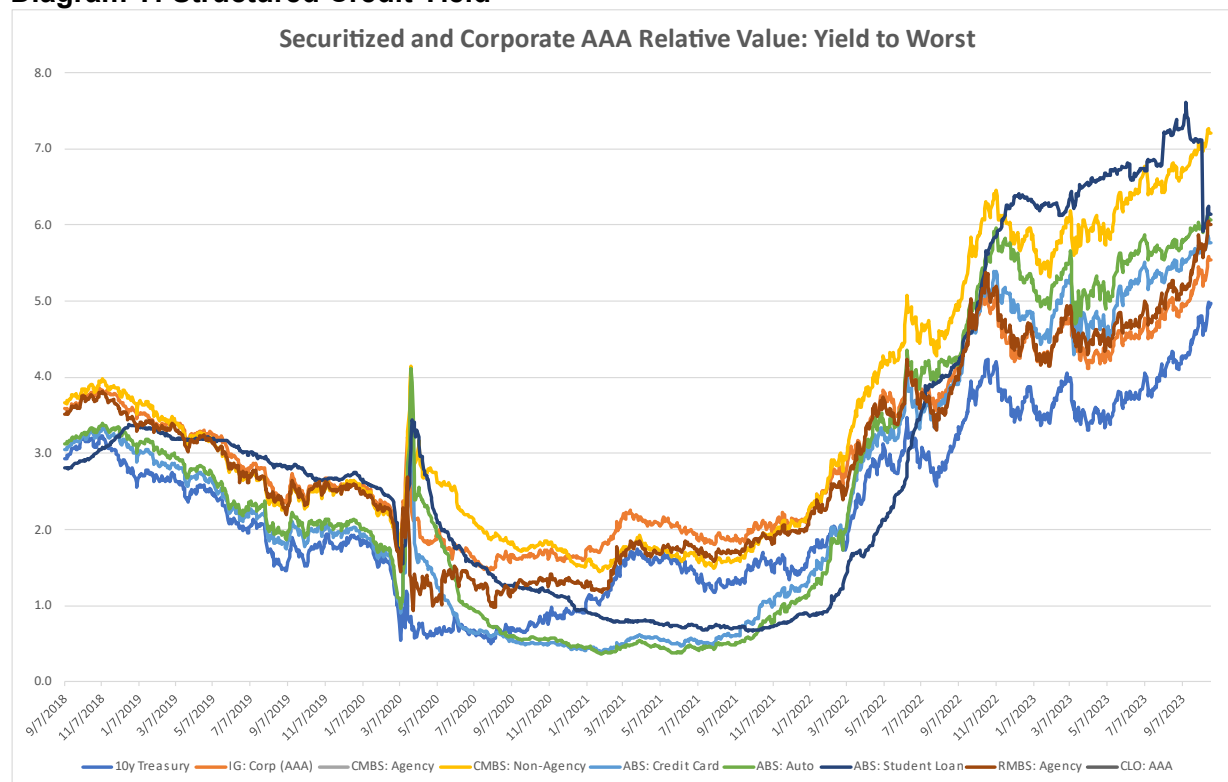
Diagram Q: U.S. Large Cap M&A Valuations (EV/EBITDA)

Diagram R: Dry Powder for All Private Equity Buyouts

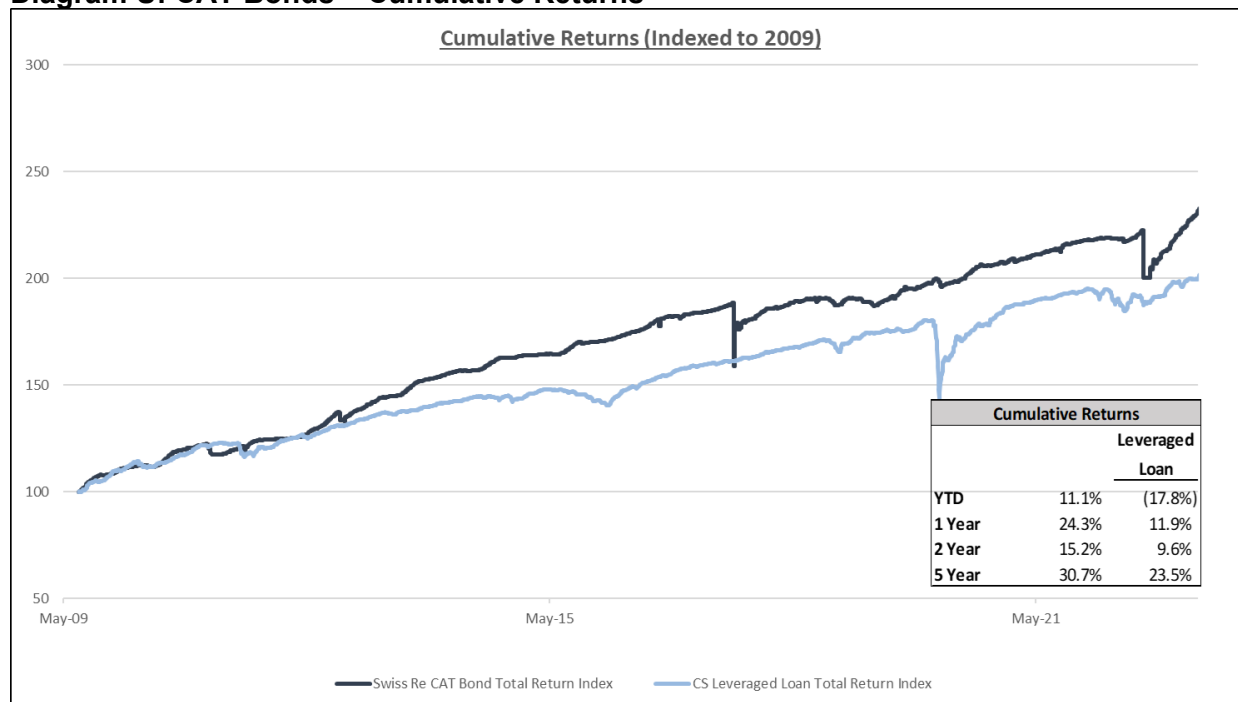
Source: Pitchbook

Diagram S: Structured Credit Spreads

Source: Bloomberg

Diagram T: Structured Credit Yield

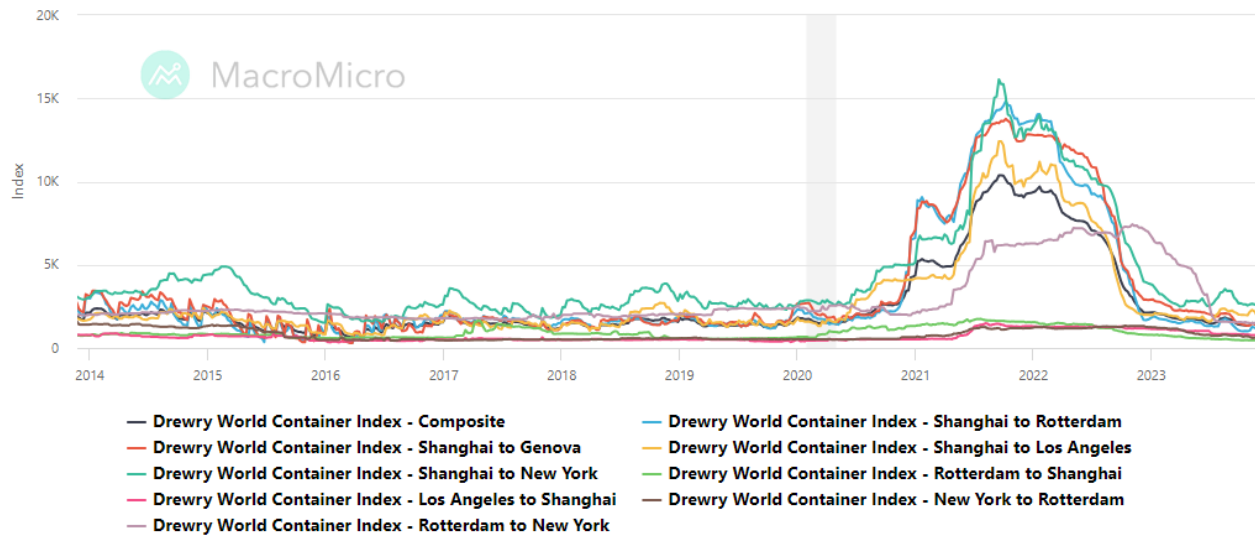
Source: Bloomberg

Diagram U: CAT Bonds – Cumulative Returns

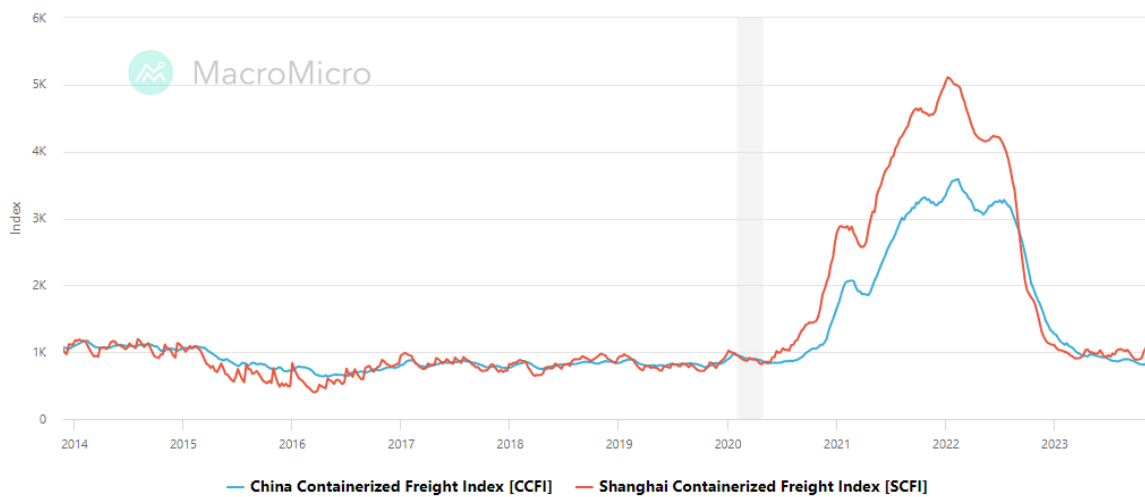
Source: Bloomberg

Freight Rates

Drewry World Container Index



China-Global & Shanghai Export Container Freight Index



About Z Capital Group, L.L.C.

Z Capital Group, L.L.C. (“ZCG”) is a leading, privately held merchant bank comprised of private markets asset management, business consulting services, technology development and solutions.

ZCG has approximately \$7B of AUM with a global team comprised of approximately 400 professionals.
www.zcg.com

Asset Management

Z Capital Partners, LLC (“ZCP”) is the private equity fund management platform of ZCG. ZCP pursues a strategy of acquiring companies that are growth platforms, corporate carve-outs, buy & build, go-private transactions, and turn arounds.

Z Capital Credit Partners, LLC (“ZCCP”) is the credit fund management platform of ZCG. ZCCP invests across a range of credit investments including leveraged loans, private debt, direct lending, and opportunistic credit. ZCCP manages closed and open ended funds as well as structured vehicles of strategic debt.

Both investment platforms share ZCG common resources, including infrastructure, legal, and cross global intelligence.

ZCG Consulting

ZCG Consulting (“ZCGC”), the strategic management consulting platform of ZCG, is a team of operating professionals within various disciplines of expertise including: financial reporting & planning, technology assessment & implementation, talent acquisition & analysis, global supply chain & logistics, c-suite advisory, real estate operations & management, insurance & risk management, in support of portfolio companies. The team works closely with company management teams and investment professionals to optimize operations and financial rigor, ultimately leading to value creation and increased performance.

Technology

Webonise US, LLC (“Webonise”) is a software development and technology services firm with offices across the globe.

Core technology productions and services include customizable software development, data science and business intelligence solutions, intelligent automation, digital marketing and cybersecurity advisory.

www.weboniselab.com

Olympus Fintech (“Olympus”) is a software product and platform which provides private equity, debt, and CLO managers with customizable and simplified workflows, data management, and robust reporting capabilities.

www.olyfintech.com

IMPORTANT INFORMATION and DISCLAIMER: Certain information contained in this material has been obtained from third party sources that we deem to be reliable, but we do not warrant its accuracy or completeness, and any yield referenced is indicative and subject to change. The material contained herein is intended as a general market commentary. Any opinions or statements contained herein are purely the author’s and may not reflect those of Z Capital or any affiliates. The opinions or statements expressed are for informational purposes only and are subject to change without notice. This material should not be regarded as research or a Z Capital research report or as including sufficient information to support an investment decision. Certain statements contained in this document are forward-looking statements. Forward-looking statements are inherently uncertain as they are based on expectations and assumptions concerning future events and are subject to numerous known and unknown risks and uncertainties which could cause actual events or results to differ materially from those projected. Statements in this document are not intended to be, and should not be construed as, legal, business, investment, or tax advice. This document is not intended to be relied upon as the basis for any investment decision. Past performance is not a guarantee of future results. This material is not, and is not intended as, an offer or solicitation for the purchase or sale of any financial instrument.

AUM is Gross Pro-Forma as of May 31, 2023, and reflects certain transactions set to close prior to the end of Q3 2023.

PERFORMANCE						
Market Indices		15-Dec	8-Dec	WoW Change	YTD Change	YoY Change
DJIA		37,305.16	36,247.87	2.92%	12.35%	10.43%
S&P 500		4,719.19	4,604.37	2.49%	22.74%	19.07%
NASDAQ		14,813.92	14,403.97	2.85%	41.11%	33.68%
MSCI - EAFE		2,192.98	2,138.43	2.55%	12.83%	11.79%
MSCI - Emerging Markets		1,000.89	975.01	2.65%	4.83%	3.27%
US Dollar Index		102.55	104.01	(1.40%)	(1.69%)	(2.12%)
VIX		12.28	12.35	(0.57%)	(41.16%)	(44.91%)
US Equities Avg Daily Dollar Volume (\$ in Billions)		321.79	332.32	(3.17%)	(35.33%)	(39.10%)
Market Ratios		15-Dec	8-Dec	WoW Change	YTD Change	YoY Change
TED Spread	3 Month LIBOR - 3 Month T-Bills	24.82	18.01	37.81%	7.44%	(49.73%)
Put/Call Ratio	Equities	0.53	0.56	(5.36%)	(38.37%)	(22.06%)
Commodities Indices (\$ USD)		15-Dec	8-Dec	WoW Change	YTD Change	YoY Change
Core Commodity Index	CRY Index	265.07	262.82	0.85%	(4.69%)	(0.50%)
Gasoline - Pump	Gallon	3.08	3.17	(2.90%)	(0.71%)	(7.24%)
Gasoline - Futures	Gallon	2.14	2.05	4.25%	(10.35%)	4.29%
Crude Oil - WTI	Barrel	71.43	71.23	0.28%	(10.22%)	(0.04%)
Crude Oil - Brent	Barrel	76.55	75.84	0.94%	(8.78%)	0.53%
Natural Gas	MM BTU	2.49	2.58	(3.49%)	(44.40%)	(58.22%)
Coal (1 contract = 1,000 tons)	Contract	214.63	214.63	0.00%	7.03%	7.03%
Aluminum	Metric Ton	2,247.50	2,134.00	5.32%	(5.94%)	(10.21%)
Copper	Metric Ton	8,549.00	8,448.50	1.19%	2.39%	0.07%
Iron Ore	Metric Ton	135.08	135.45	(0.27%)	22.27%	23.37%
Steel - Hot Rolled Coil	Metric Ton	1,068.00	1,070.00	(0.19%)	39.97%	35.88%
Steel - Cold Rolled Coil	Metric Ton	1,205.00	1,180.00	2.12%	32.42%	43.45%
Ferrous Scrap	Metric Ton	560.00	520.00	7.69%	29.33%	45.45%
Gold	Troy Ounce	2,019.62	2,004.67	0.75%	12.31%	12.88%
Silver	Troy Ounce	23.86	23.00	3.72%	0.52%	3.43%
Cotton	Pound	76.74	78.66	(2.44%)	(7.95%)	(5.06%)
Butter	Pound	2.49	2.67	(6.74%)	3.97%	(7.26%)
Cheese	Pound	1.64	1.64	(0.06%)	(17.46%)	(19.41%)
Cocoa	Pound	1.93	1.94	(0.63%)	61.49%	70.72%
Corn	Bushel	4.83	4.66	3.70%	(27.50%)	(23.58%)
Milk, Non Fat Dry	Pound	1.19	1.19	0.19%	(18.42%)	(16.63%)
Soybean	Bushel	13.16	13.04	0.90%	(11.04%)	(11.47%)
Sugar	Pound	0.22	0.23	(5.86%)	4.81%	11.74%
Wheat	Bushel	6.29	6.15	2.32%	(18.91%)	(13.12%)
Live Cattle	Pound	1.68	1.65	1.68%	7.22%	(87.10%)
Lean Hogs	Pound	0.72	0.68	5.08%	(18.13%)	(12.32%)
Beef, USDA Ground	Pound	2.92	2.88	1.26%	7.24%	17.94%
Chicken, Boneless & Skinless	Pound	3.52	3.54	(0.56%)	0.00%	15.07%
Currencies		Spot Prices		Futures		10-Year Historicals
		15-Dec	8-Dec	2024	2025	Low High
Japanese Yen	USDJPY	142.150	144.950	130.000	135.000	75.820 138.570
Chinese Renminbi	USDCNY	7.122	7.170	6.700	7.000	6.041 7.179
Swiss Franc	USDCHF	0.871	0.880	0.870	0.890	0.721 1.030
British Pound	GBPUSD	1.268	1.255	1.310	1.280	1.130 1.717
Euro Zone Euro	EURUSD	1.090	1.076	1.140	1.120	0.986 1.483
Canadian Dollar	USDCAD	1.338	1.358	1.270	1.310	0.943 1.458

TECHNICALS (Supply / Demand)

Bank Loan & High Yield, Inflows (Outflows) Mutual Fund, \$ USD in Millions, (Source: LCD News)						
Week Ending		Bank Loans		High Yield		
13-Dec-23		\$	83	\$	759	
6-Dec-23		\$	82	\$	2,051	
29-Nov-23		\$	124	\$	295	
22-Nov-23		\$	(75)	\$	325	
15-Nov-23		\$	287	\$	4,574	
8-Nov-23		\$	686	\$	6,249	
1-Nov-23		\$	126	\$	(953)	
25-Oct-23		\$	(123)	\$	(942)	
18-Oct-23		\$	(23)	\$	(1,915)	
Year To Date 2023		\$	(18,051)	\$	(17,252)	
Year Ended December 31, 2022		\$	(12,694)	\$	(48,558)	
Year Ended December 31, 2021		\$	46,498	\$	(12,984)	

NEW ISSUE SUMMARY - BI-WEEKLY

Institutional Loans		12/15/2023	Deals	Amt (\$mm)
Launched		Prior Two Weeks	12	8,233
Forward Calendar			4	7,437
High Yield		12/15/2023	Deals	Amt (\$mm)
Launched		Prior Two Weeks	9	6,532
Forward Calendar			3	4,711

ECONOMIC DATA RECAP

Key Economic Indicators:		Period	Actual	Expected	Prior
Initial Jobless Claims		Dec	218K	218K	209K
Continuing Claims		Dec	1,927K	1,865K	1,840K
Change in Non-Farm Payrolls		Dec	223K	205K	263K
Change in Private Payrolls		Dec	220K	188K	221K
Unemployment Rate	U-3	Dec	3.5%	3.7%	3.7%
Unemployment Rate	U-6	Dec	6.6%	6.5%	6.7%
Average Work Week		Dec	34.3	34.7	34.4
Existing Home Sales		Dec	3.79M	3.90M	3.96M
Housing Starts		Dec	1,372K	1,350K	1,358K
S&P/Case-Shiller Composite	YoY	Dec	19.1%	18.6%	18.6%
S&P/Case-Shiller Composite	MoM		1.8%	1.5%	1.5%
Consumer Confidence		Dec	91.3	90.0	88.9
GDP	QoQ-Annualized	3Q23	2.4%	1.8%	2.0%
Durable Goods Orders		Dec	2.0%	1.9%	1.9%
Total Vehicle Sales		Dec	15.32M	15.50M	15.50M
Capacity Utilization		Dec	79.0%	77.0%	76.8%
Fed & Treasury Balance Sheet		13-Dec	6-Dec	WoW Change	YoY Change
Fed Total Assets	\$ in Billions	7,739,566.0	7,737,385.0	0.0%	(9.8%)
Public Debt	\$ in Billions	33,828.2	33,818.1	0.0%	10.3%
US Debt Outstanding		2023	1Q23	QoQ Change	YoY Change
Domestic Nonfinancial Debt	\$ in Billions	69,511.9	68,910.4	0.9%	15.6%
Shared National Credit		2022	2021	YoY Change	
Shared National Credit Total Commitments	\$ in Billions	5,178.8	5,072.2	2.1%	
Special Mention Commitments	\$ in Billions	217.3	263.9	-17.7%	
Classified Commitments	\$ in Billions	332.8	365.9	-9.0%	

ECONOMIC / GDP DATA

International Monetary Fund Growth Rates (Source: IMF "World Economic Outlook")

Country	Actual		Projected	
	2020	2021	2022	2023
United States	(3.5%)	5.7%	2.1%	1.6%
Brazil	(4.1%)	4.6%	2.9%	0.9%
China	2.3%	8.1%	3.0%	4.5%
Germany	(4.9%)	2.8%	1.8%	(0.1%)
India	(8.0%)	8.9%	6.8%	5.9%
Japan	(4.8%)	1.6%	1.1%	1.3%
United Kingdom	(10.0%)	7.4%	4.0%	(0.3%)

Market Indices		15-Dec	8-Dec	WoW Change	YTD Change	YoY Change
S&P/LSTA Leveraged Loan Index		3,702.59	3,681.00	0.59%	12.54%	12.84%
Barclays High Yield Index		2,453.59	2,407.40	1.92%	11.19%	10.92%
Barclays Aggregate		2,148.64	2,103.25	2.16%	4.19%	2.84%
Loan Market Bids		15-Dec	8-Dec	WoW Change	YTD Change	
S&P Flow Name Index		98.35	98.35	0.00%	(0.39%)	
S&P 100 Name Index		96.48	95.85	0.67%	3.47%	
S&P BB's Index		99.40	99.18	0.22%	1.84%	
S&P B's Index		97.42	96.94	0.50%	5.33%	
S&P CCC's Index		80.88	79.45	1.80%	10.34%	
Loan Market Spreads		15-Dec	8-Dec	WoW Change	YTD Change	
S&P BB's Index		L+120	L+132	(12 bps)	(222 bps)	
S&P B's Index		L+446	L+449	(3 bps)	(151 bps)	
S&P CCC's Index		L+1596	L+1574	22 bps	71 bps	
Credit Default Swap - Volatility Indices		Index	15-Dec	8-Dec	WoW Change	YTD Change
Investment Grade CDS	Market		57.50	61.55	(6.57%)	(28.87%)
High Yield CDS	Market		367.24	401.91	(8.63%)	(22.88%)
Credit			15-Dec	8-Dec	WoW Change	YOY Change
High Yield	Ave Yield	T+375	T+370	5 bps	(65 bps)	
LCD Flow Name	Ave Spread	L+202	L+205	(3 bps)	(153 bps)	
US Treasury 2-Yr			4.45%	4.71%	(26 bps)	103 bps
US Treasury 3-Yr			4.14%	4.45%	(31 bps)	77 bps
US Treasury 5-Yr			3.93%	4.24%	(31 bps)	68 bps
US Treasury 7-Yr			3.96%	4.27%	(31 bps)	76 bps
US Treasury 10-Yr			3.93%	4.23%	(30 bps)	78 bps
US CLO Spreads - New Issue			15-Dec	8-Dec	WoW Change	YTD Change
AAA		S+183	S+180	3 bps	(10 bps)	
AA		S+250	S+255	(5 bps)	(10 bps)	
A		S+295	S+318	(23 bps)	(15 bps)	
BBB		S+460	S+480	(20 bps)	(5 bps)	
BB		S+775	S+800	(25 bps)	0 bps	
Market Rates			15-Dec	8-Dec	WoW Change	YTD Change
Fed Fund Rate			5.31%	5.31%	0 bps	99 bps
Prime Rate			8.50%	8.50%	0 bps	100 bps
Broker Call Rat			7.25%	7.25%	0 bps	100 bps
1M SOFR			5.31%	5.32%	(1 bps)	101 bps
3M SOFR			5.39%	5.30%	9 bps	115 bps
1M Libor			5.47%	5.47%	0 bps	108 bps
3M Libor			5.63%	5.63%	(0 bps)	90 bps
6M Libor			5.65%	5.72%	(7 bps)	49 bps
Short Interest - Billions of shares			31-Oct	30-Sep	MoM Change	YTD Change
NYSE Mkt Short Interest			16.14	16.04	0.68%	3.86%
Nasdaq Short Interest			12.92	12.91	0.09%	0.37%
Fed Corp Primary Dealer Positions - \$ USD in Billions			6-Dec	29-Nov	WoW Change	YTD Change
Net Outright Total Corp Securities			10.98	10.56	3.98%	0.00%
Margin Debt - \$ USD in Billions			31-Oct	30-Sep	MoM Change	YTD Change
Margin Debt			705.28	693.05	1.76%	8.57%

Leveraged Finance Primary Volume - \$ USD in Billions

12/15/2023	Year To Date		Year End	
	2023	2022	2021	YoY Change
Bank Debt	83.8	145.0	588.4	(42.21%)
Senior Secured Bonds	44.0	13.0	147.9	238.46%
Unsecured Bonds	22.0	42.0	313.8	(47.62%)
Total Bonds	66.0	55.0	461.7	20.00%
Totals	149.8	200.0	1,050.1	(25.10%)

DEFAULT ACTIVITY

Total Loan Defaults - as of:		30-Sep	31-Aug	YE 2022
Default Rate by Total Amount of All Loans Outstanding		1.72%	1.56%	0.98%
Default Rate by Total Number of All Loan Issuers		1.89%	1.62%	0.98%

Employment - Labor Participation Rates				31-Oct	30-Sep	YTD Change		
Civilian Employment as % of Total Labor Force				60.4%	60.4%	0.60pp		
Labor Force Participation Rate				62.6%	62.6%	(0.25pp)		
Government Assistance				31-Oct	30-Sep	YTD Change		
SNAP Ika Food Stamps - # of Participants		in Millions		40.521	40.770	(2.01%)		
Retail Sales				31-Oct	30-Sep	YTD Change		
Adj. Retail & Food Services Sales Index - US Census				683.0	687.4	0.79%		
US Home Foreclosures and Delinquencies				31-Oct	30-Sep	YTD Change		
Home Foreclosures Inventory			in Thousands	178	178	2.22%		
Delinquency Rate				0.34%	0.51%	(2.55pp)		
U.S. Rig Count - Active Drilling Rigs, Exploring or Developing Oil & Natural Gas								
Type	Peak- 1/100 to Date	# of Rigs	% Change	15-Dec	8-Dec	YTD Change		
Oil	10/10/2014	1,609	(61.28%)	623	618	10.66%		
Gas	9/12/2008	1,606	(90.66%)	150	152	0.67%		
Rail & Truck Volume				31-Oct	30-Sep	YTD Change		
Total Rail Carloads		Tons in Thousands		1,052.66	1,050.74	2.82%		
Total Intermodal		Tons in Thousands		1,014.59	1,019.04	(6.17%)		
Truck Tonnage Index				131.60	130.85	9.35%		
TSA Checkpoint Travel Numbers				14-Dec	7-Dec	WoW Change	YoY Change	
Weekly Traveler Throughput			in Thousands	16,048.8	15,149.4	5.94%	9.79%	
Freight Rates				15-Dec	8-Dec	WoW Change	YTD Change	YoY Change
Freightbus Baltic Index				1,270	1,179	7.72%	(43.46%)	(79.83%)
Shanghai - Los Angeles Spot Rates				2,240	2,361	(5.12%)	(2.54%)	(78.67%)
Shanghai - NY Spot Rates				3,425	3,545	(3.39%)	(1.34%)	(72.93%)
Shanghai Containerized Freight Index				1,030	1,031	(0.16%)	(4.26%)	(74.21%)