"When the levee breaks": the business cycle, liquidity, investor positioning, regulation and implications for investors in credit markets

First, a market update. Elevated equity valuations (see last chart below), a topic we have revisited numerous times since the fall of 2014, finally cracked this month under the weight of weak sales and earnings growth expectations, increasing weakness in US manufacturing and questions about China. As markets react to the current **profits recession**¹, the next question is whether a US **GDP recession** is in the cards as well. This is an important issue, since when profit and GDP recessions coincide, negative feedback loops and stock price declines are worse. While manufacturing surveys are in territory that has coincided with GDP recessions in the past, services are in better shape. Our sense right now is that US growth in 2016 may be low (1.5%-2.0%) but not recessionary. If so, once the current bout of retail and fast money selling is over (and it may not be over yet), equity markets should see a modest bounce and then remain range-bound until currently stagnant earnings show some upward momentum.





When services hold up better than manufacturing, GDP recessions can be avoided, PMI survey level, 3-month avg



Source: Institute for Supply Management. December 2015.

Looking ahead, US and European consumer spending should rise given payroll growth and lower oil (though there may be diminishing returns to falling oil given low bank loan-loss reserves and disruptions in high yield; remember, energy is over-represented in markets relative to its economic footprint).

On the negative front, I was mystified by the consensus view last year that China's currency peg to the dollar would hold, and am equally mystified by the view that it will hold against a newly defined basket (whatever that turns out to be). China's currency appreciated massively over the last 2 decades and is now creating more problems for China than it solves. I don't think the currency wars are over yet, since weak growth, capital outflows and labor unrest may force China to devalue more than markets expect.



te "Mission accomplished": QE drives up equity valuations Combined forward price-to-sales ratio on MSCI US, Europe and



¹ For Q4 2015, we expect S&P 500 earnings to be -3% y/y and +2% ex-energy. For 2016, we expect exenergy earnings growth of 5%-7%. In other words, while the profits recession is mostly a reflection of weak energy earnings, earnings growth in the remaining sectors does not command premium valuations.

When the Levee Breaks²

Since 2013, the *Eye on the Market* has sounded warnings about exuberance in credit markets³. With high yield redemptions growing and spreads rising, we revisit the issue.

There have been two narratives to watch regarding credit since 2008: the surge in corporate issuance and demand by investors frantically searching for yield, and the changes in ownership, liquidity and turnover in the wake of new regulations. From 2008 to 2014, the first narrative dominated and credit spreads tightened. Now that outflows are picking up, these two narratives are on a collision course that has important implications for investors. Increasing volatility and rising credit spreads create both risk and opportunity for investors. In this special issue *Eye on the Market*, we review credit as a story with 6 Acts and an Epilogue. The bottom line: while spreads have widened, it's too early in my view for a broadbased re-entry into high yield. A selective approach ideally free of benchmark constraints makes more sense to me, particularly given risks of cross-over selling and the impact of new regulations on liquidity and market depth.

Michael Cembalest J.P. Morgan Asset Management

- Act I: The War on Savers
- Act II: Some financial sector intermediaries go into permanent or semi-retirement
- Act III: Changes to the regulatory landscape
- Act IV: A chorus of concern emerges
- Act V: Early evidence of credit market fragmentation and lower turnover
- Act VI: The changing composition of credit market ownership
- Epilogue: Risks and potential opportunities for investors in credit
- Appendix I: Bottom-fishing in high yield bonds during the financial crisis of 2008-2009

² A blues song written by Kansas Joe McCoy and Memphis Minnie in 1929, and covered Led Zeppelin in 1971.

³ On the deterioration in high yield underwriting standards, growing out-of-index positions, rising component of CCC-rated issuance, growing impact of energy issuers, etc: see *Eye on the Markets* dated June 4, 2013, January 1, 2014 and January 1, 2015.

Act I: The War on Savers

The aforementioned reference to war makes sense in light of the following: we have just lived through the longest period of negative real returns on cash since 1830, other than during wartime. This kind of thing tends to eat away at investor resistance; as time passes, many succumb to the temptation of yield irrespective of underlying issuer risks.



Outstanding debt securities of advanced economy non-financial corporations, USD trillions



Since 2009, non-financial corporations in the developed world increased debt issuance by \$2.5 trillion. If endowments, foundations, pension plans, sovereign wealth funds, insurance companies and individuals were to hold everything to maturity, we would only have to worry about the business cycle and ultimate default risk. However, many investors hold more credit than they normally would, particularly "cross-over buyers"⁴, who are not included in the chart below on dedicated mutual fund and exchange-traded fund ("ETF") holdings. A combination of an aging business cycle, rising volatility, stress in the energy sector and gradually rising real interest rates may result in increased withdrawals.

With respect to mutual funds which own an increasingly large share of credit positions, the levee began to break in the middle of 2014. The synchronous behavior of investors reducing credit exposure is part of a broader trend shown in the second chart: an increasing degree of "herd mentality" since the Fed's quantitative easing programs began.



The frantic search for yield





⁴ Cross-over buyers refer to institutional investors that purchase out-of-index positions to enhance

returns. Examples include high grade bond funds owning high yield, developed market equity funds owning emerging markets and corporate bond funds owning preferred stock. The "out-of-index" concept can also refer to positions whose risk perceptions change; in 2011-2012, Spanish and Italian government bonds were sometimes seen as being inconsistent with European government bond mandates, and resulted in forced selling. The same thing happened with energy bonds held in high yield funds in 2015.

Act II: Some financial sector intermediaries go into permanent or semi-retirement

Even during good times, credit markets are top-heavy: around 90% of all trading volume in high grade and high yield bonds is related to the most liquid 20% of all issues⁵. Here's another stat: of 26,000 publicly registered corporate bonds, 3,000 did not trade at all in 2014, and another 5,000 traded on 5 days or less⁶. When markets become volatile and withdrawals pick up, the less liquid part of the market ends up being traded as well.

When owners of credit want to buy or sell positions, they generally look to large financial institutions to disintermediate the flows. How much capital are these institutions committing to bond trading? Despite the increase in issuance shown above, financial institutions have reduced their trading footprints. The first chart is a proxy for risk capital allocated to credit and foreign exchange positions for a group of banks and broker-dealers since 2009. This chart excludes Lehman and Bear Stearns; had they been included the post-2008 declines would be even larger.

The second chart shows revenues from fixed income trading, with projections through to 2018. Within fixed income trading, rates and currency trading revenues are still growing, with ongoing y/y declines in traditional trading of loans and bonds, and of structured credit as well.



Source: SNL Financial. Q3 2015. Includes BAC, BCS, BMO, C, CFG, DB, GS, HSBC, JPM, ML, MS, RBC, TD, UBS, and WFC.





⁵ "US Corporate Bond Market Update", J.P. Morgan Securities North America Credit Research, March 31, 2015.

⁶ "When agents lose their principals: Fixed income liquidity revisited", Citi Research, August 2015.

Act III: Changes to the regulatory landscape

There have been a lot of regulatory changes designed to protect bank depositors, and to reduce systemic risk. When looking at the new rules, a financial crisis such as the one that occurred in 2008 appears less likely: risk-based capital ratios are higher, loan to deposit ratios are lower (i.e., less reliance on wholesale funding), there's more stress-testing of bank portfolios, and in the event of a bank failure, bondholders would take the bulk of the risk instead of taxpayers, depositors or the Federal Reserve.



Before getting into consequences for credit markets resulting from new regulations, let's remember why improved protections were needed in the first place. In 2009, the deposits of failed and assisted banks as a % of GDP was even higher than at the peak of the Great Depression in 1933. The Federal Reserve was also required to take extraordinary steps to prevent additional bank and broker-dealer defaults through a variety of emergency lending facilities, shown in the table. This may be why former Federal Reserve Chairman Bernanke said in 2014 that "September and October of 2008 was the worst financial crisis in global history, *including* the Great Depression"⁷.



Deposits in failed and assisted US banks Emergency facilities created by the Federal Reserve during % of GDP the Financial Crisis

	Peak Outstanding Balance (\$ bn)
Term Auction Facility	\$493
Commercial Paper Funding Facility	\$348
Term Securities Lending Facility	\$236
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility	\$152
Primary Dealer Credit Facility	\$147
Term Repurchase Transactions	\$80
AIG Revolving Credit Facility	\$72
Term Asset-Backed Securities Loan Facility	\$48

Source: Levy Economics Institute, Bard College. 2011.

⁷ "Bernanke: 2008 Meltdown Was Worse Than Great Depression", WSJ, August 26, 2014.

Unfortunately, reduced *systemic* **risk may come at the cost of greater** *market* **risk.** Many new rules and proposals make it harder for banks to expand their balance sheets in a time of crisis, either to take risk or to facilitate risk-taking by others. Here's our brief description of rules impacting credit markets (they are *very* brief, since in total, these regulations encompass thousands of pages of text).

Scope	Description and Impact	Applicable rules
Bank capital	Higher capital requirements, including against corporate bond trading inventories; countercyclical capital buffers to be implemented from 2016 to 2018; phase-out of non- core Tier 1 capital and lesser-quality Tier 2 capital; leverage and supplementary leverage ratios are applied to total assets rather than risk-weighted assets; more emphasis on "tail events" than expected outcomes in risk models used to set capital levels; limitations on transferring assets from trading books to banking books, reducing appetite to hold potentially volatile positions	Basel III capital rules, Basel Fundamental Review of the Trading Book, Supplementary Leverage Ratio, Global Systemically Important Bank Surcharge
Bank liquidity	Banks must hold an amount of high quality liquid assets that can quickly be converted to cash if needed to meet near-term and long-term obligations under stress; reduces money multiplier in the banking system and demand for non-cash equivalents	Liquidity Coverage Ratio, Net Stable Funding Ratio
Stress testing	Economic and market shock scenario analysis results in more robust capital framework but reduces banks' ability or incentive to participate in certain businesses	Comprehensive Capital Analysis and Review
Bank structure	Prohibits proprietary trading and prevents banks from making speculative investments with their own money; requires ex-ante assessments of client demand even for market making activities; banks less willing to hold inventory that may become illiquid; limits on position holding periods	Volcker Rule, EU Bank Structural Reform
Money market reform	Requires floating rather than fixed Net Asset Values, potential for reduced investor participation in Prime Money Market funds in times of stress. With fund conversions and investor outflows combined, the shift in assets away from prime MMFs could be \$600-\$650bn (JPMS Research)	SEC Money Market Reform
Credit market transparency and buy-ins	The European Securities and Market Authority published standards relating to pre- and post-trade transparency ⁸ due to take effect in 2017 for bonds and derivatives. In the US, TRACE rules increased transparency requirements for 144a securities, which affects the bulk of the HY market.	ESMA Markets in Financial Instruments Directive and regulations on mandatory buy-ins; TRACE
Securitization	Capital charges on retained positions could alter the balance sheet economics of some securitization activities	Securitization Capital Rules

⁸ On increased transparency rules. A J.P. Morgan Securities report in November 2015 outlined parallels between current debt market transparency efforts and prior ones in equity markets: "Equity markets went through a similar phase of mandated transparency in 1990s/2000s. Principal traders disappeared and large trades became harder to execute, forcing institutional investors to use multiple venues and multiple tickets. More frequent occurrence of so called "flash crashes" in equity markets suggests that the agency-driven trading model in equity markets is not panacea for bond markets. These agency traders, including high frequency traders, tend to show lower commitment and tend to withdraw from market making more quickly than principal traders once uncertainty and volatility rises." J.P. Morgan Flows & Liquidity Report, November 20, 2015.

Act IV: A chorus of concern emerges

News reports cite Paul Volcker and Federal Reserve officials as saying they do not see significant impacts on credit market liquidity from increased regulation. I am not surprised by this; there aren't too many people that sponsor or enact legislation, and then provide unbiased commentary on both its positive and negative impacts. In a similar vein, I have never heard much from the Federal Reserve or the Department of Housing and Urban Development on their contributions to the housing crisis⁹, which remain purely private sector train wrecks as far as the official canon is concerned.

In any case, as far back as 2012, a chorus emerged citing potential negative consequences of the Volcker Rule and transparency rules on credit markets.

"The Volcker Rule will have a negative effect on market making and liquidity provision for many securities. The Volcker Rule will induce banks to retrench more from market making in smaller and riskier securities where large and unexpected supply-demand shocks are more likely, thereby reducing market making in the very securities where it is most valuable. The securities issuers and the investors will feel the effects".

Anjan Thakor, Washington University in St. Louis¹⁰

"The Agencies' proposed implementation of the Volcker Rule would reduce the quality and capacity of market making services that banks provide to US investors. Investors and issuers of securities would find it more costly to borrow, raise capital, invest, hedge risks, and obtain liquidity for their existing positions. Eventually, non-bank providers of market-making services would fill some or all of the lost market making capacity, but with an unpredictable and potentially adverse impact on the safety and soundness of the financial system. These near-term and longer-run impacts should be considered carefully in the Agencies' cost-benefit analysis of their final proposed rule".

Darrell Duffie, Stanford University Graduate School of Business¹¹

Proprietary trading and market making are not that different on a transactional basis but reflect different intent, which is not possible to observe. One risk is that the Volcker Rule negatively affects market making activities as well. "Some people who have a stake in the potential effects of the Volcker Rule on the efficiency of capital markets are warning us about these risks...For example, Agustin Carstens [governor of the Central Bank of Mexico] has expressed great concern about the effects of the Volcker Rule on market liquidity because of its effects on US banks and on all banks with operations in the US...Eliminating proprietary trading from a bank amounts to what I call the 'Volcker lobotomy': it removes from the banking organization the human capital of people who understand these financial instruments best".

Charles Calomiris, Columbia University¹²

"We find that transparency causes a significant decrease in price dispersion for all bonds and a significant decrease in trading activity for some categories of bonds. The largest decrease in daily price standard deviation, 24.7%, and the largest decrease in trading activity, 41.3%, occurs for bonds in the final Phase, which consisted primarily of high-yield bonds. These results indicate that mandated transparency may help some investors and dealers through a decline in price dispersion, while harming others through a reduction in trading activity".

Paul Asquith, MIT¹³

"Although the eventual impact of the Volcker Rule is unknown, any diminution of the banks' likelihood of engaging in proprietary buying during crises suggests a significant reduction in liquidity just when it may be needed most".

Howard Marks, Oaktree Capital Management¹⁴

⁹ See "*Course of Empire*", Special Edition Eye on the Market, November 18, 2013.

¹⁰ "The Economic Consequences of the Volcker Rule", Anjan V. Thakor, John E. Simon Professor of Finance, Olin School of Business, Washington University in St. Louis, Summer 2012.

¹¹ "Market making under the proposed Volcker Rule", Darrell Duffie, Stanford University, 2012.

¹² Charles Calomiris, "*Panel Discussion on the Volcker Rule*", Perspectives on Dodd-Frank and Finance, 2014. There's an interesting discussion on page 124 of how the Volcker Rule was quickly passed in 2010 as part of the Dodd-Frank reform with "little consideration of its potential costs, based on the advocacy of Paul Volcker and little presentation to Congress of anything that could be called evidence".

¹³ "The Effects of Mandatory Transparency in Financial Market Design: Evidence from the Corporate Bond Market", Asquith (MIT) et al, 2013.

¹⁴ Howard Marks in Barron's, March 26, 2015.

Act V: Early evidence of credit market fragmentation and lower turnover

The impact of the Volcker Rule and other regulations on credit markets was hard to measure from 2009 to 2014; **investor demand for credit overwhelmed any structural issues affecting the inner workings of credit markets**. One example that we cited in the 2016 Outlook: there were 95 consecutive weeks of inflows into loan mutual funds through April 2014. Now, however, **we are starting to see the impact of dealer retrenchment, greater fragmentation in trading and heightened regulatory costs**.

We hear a lot of comments from long-only credit managers about declining market depth and liquidity. Many sound like this: "I used to be able to trade \$25 mm in bonds on names like Sprint, which has \$30 bn of bonds outstanding; but now it's hard to move \$5 mm bonds, and I have to split them into smaller trades". These anecdotes are not just chatter; as shown below, despite large increases in the size of many fixed income sectors, turnover is down 25%-65% since 2006. Furthermore, the size of the average high grade and high yield trade has fallen as well (albeit with a partial rebound since 2009)¹⁵. Some people believe that electronic trading will eventually solve some of these problems, but so far, outlets like MarketAxess mostly deal with odd lots of less than \$250k.



The debate around liquidity involves a lot of different measures: bid-offer spreads, market depth, turnover, sensitivity of price to changes in volume, etc, and some cannot be easily or comprehensively tracked. However, one measure that we believe is potentially misleading: stability in bid-offer spreads. Here are two reasons why:

- Bid-offer spreads from some providers and electronic platforms are **indicative**, and not binding; it is often the case that actual trades take place outside indicative bid and offer prices, making them poor proxies of true transactions costs
- Stable bid-offer spreads may also reflect **a shift from dealers acting as principal to acting as agent**. In the latter example, dealers simply find a counterparty to take the other side of the trade, and charge a small bid-offer for the service since their balance sheet is never really at risk. If that's the case, stable or falling bid-offer spreads could be a sign of *falling* rather than improving liquidity

¹⁵ According to information gathered from our sources, before 2008, large broker-dealers made markets on investment grade bond index products that were \$2 - \$4 bn per side at a bid-offer of 0.125 bps. Today, the same markets are \$250 mm per side at a bid-offer of 1 bp. Similarly, before 2008, high yield index products were offered at \$100 - \$200 mm per side at a bid-offer of 0.0625 pts. Today, the same markets are \$25 - \$50 mm per side at a bid-offer of 0.2 pts.

There are other signs of fragmentation as well. None of them have catastrophic consequences, but they all reflect tighter liquidity conditions:

- The decline in the size of Treasury futures trades
- The decline in the size of the single-name credit default swap market, which facilitates hedging
- The decline in bank holding company collateralized lending to broker-dealers that are not bank holding companies. This latter example is most likely a consequence of Supplementary Leverage Ratio rules, which treat every asset the same regardless of risk
- The recent decline in high yield and high grade bonds held by primary dealers¹⁶



2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 Source: Stanford University, CME Group. November 2015.

Collateralized loans from bank holding company dealers to non-bank holding company dealers, USD billions



Source: Federal Reserve Board of NY. July 2015. Monthly average shown.

Net notional single-name CDS outstanding USD trillions \$1.6 \$1.5 \$1.4 \$1.3 \$1.2 \$1 1 \$1.0 \$0.9 \$0.8 \$0.7 \$0.6 2008 2009 2010 2011 2012 2013 2014 2015 2016 Source: J.P. Morgan Securities LLC. January 1, 2016.

Primary dealer positions in high yield & investment grade bonds, USD billions, 4-week average (both axes)



¹⁶ Many reports on broker-dealer holdings of corporate bonds reference a Federal Reserve series entitled "Corporate securities maturing within one year". However, **the Fed includes non-agency mortgage backed securities in this series**. As a result, it's misleading and exaggerates what corporate holdings were, given the huge run-up in non-agency MBS from 2003 to 2007. A new Fed series excludes non-agency MBS beginning in April 2013, and should not be combined with the prior series.

Summary of the liquidity evidence so far

The implications of all these changes are best characterized by a report from the Bank for International Settlements published in 2015:

"Drawing from a recent report by the Committee on the Global Financial System, we identify signs of increased fragility and divergence of liquidity conditions across different fixed income markets. Market-making is concentrating in the most liquid securities and deteriorating in the less liquid ones. The shift reflects cyclical (e.g. changes in risk appetite) as well as structural (e.g. tighter risk management or regulation) forces affecting both the supply of and demand for market-making services."¹⁷

To reiterate, our conclusion is that the risk of systemic bank failures and other calamitous financial sector outcomes has fallen. What we are highlighting is that the frantic search for yield, fueled by the Fed's financial repression, has resulted in a large stock of credit investments at a time of reduced capacity by traditional broker-dealers to disintermediate these flows when/if their owners seek to sell them. Early evidence suggests that this will result in increased credit market volatility, creating risks and opportunities for investors in long-only and relative value credit products.

Act VI: The changing composition of credit market ownership

The share of corporate bonds owned by open-ended mutual funds and ETFs has been rising at the same time that pension fund and insurance company shares are falling. There are a lot of moving pieces here, but the **first order conclusion we draw is that corporate bond ownership is shifting from traditional hold-to-maturity investors to vehicles that are subject to greater outflow risk**, particularly during difficult economic periods.



Source: Federal Reserve Board, JPMAM. Q3 2015. Includes US-owned foreign bonds.

¹⁷ "*Shifting tides – market liquidity and market-making in fixed income instruments*", Bank for International Settlements Quarterly Review, March 2015.

Epilogue: Risks and potential opportunities for investors in credit

The levee shown on page 3 is now breaking¹⁸, as indicated by substantial redemptions from global high yield mutual funds and ETFs (see chart below). Redemptions coincided with widening spreads on both high yield bonds and leveraged loans. It's hard to assess the full magnitude of potential selling pressure, since further selling by cross-over buyers and by collateralized loan obligation funds ("CLOs") due to ratings downgrades may also materialize¹⁹. However, the great migration out of credit has begun, and a sizable amount has already taken place.



\$0

Cumulative flows into global high yield bond funds, USD billions \$160 \$140 \$120 \$100 \$80 \$60 \$40 \$20

-\$20 J 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 Source: EPFR. November 2015.

US high yield corporate bond spreads Spread to worst over 10-year treasury



As for fundamentals of high yield issuers, to me they never justified ex-energy high yield spreads in April 2014 that were at their tightest levels on record. In *aggregate*, while interest coverage and cash flow margins are stable (reflecting benefits of low interest rates and low wage growth), leverage has been rising and sales growth is weak (2%-3% annual growth since 2013). Furthermore, aggregate index data is not as useful in credit, since *weak* issuers drive defaults rather than the *average* issuer²⁰. All things considered, risk related to weak credits is lower than in 2000 but not that different from 2007 (see last chart). On refinancing risk, the bulk of HY maturities fall after 2020. However, bonds due within 4 years is roughly the same as in 2008, implying that the distribution hasn't changed much.





Weakest credits in high vield: better than in 2000, similar

Source: Morgan Stanley Leveraged Finance Research. January 14, 2016.

¹⁸ A lot of press has focused on the decision by a **Third Avenue high yield mutual fund to gate** (i.e., cease redemptions). The high yield market has its share of problems, but I don't think Third Avenue's gated fund is a good proxy for them. Based on its filed reports, the Third Avenue fund held over 85% of its assets in securities rated CCC and below and in non-rated securities as of July 2015. This is not a proxy for the average manager.

¹⁹ With respect to **CLOs**, 30%-35% of loans held are rated B and B-. Most CLOs have maximum limits on CCC-rated exposure of 7.5%, raising the risk of forced selling should a wave of rating downgrades occur.

²⁰ The *average* storm resistance of a neighborhood comprised of both stone and straw houses tells you little about potential damages when a storm hits.





Where is fair value? High yield spreads have risen and offer an increased margin of safety for investors compared to 2012-2014. By some measures, implied default rates on energy bonds are now 18%, and implied default rates on non-energy bonds are 6%. Both of these levels are considerably higher than *trailing* default rates, but I would treat this gap with some caution. Three reasons why:

- Throughout the rather brief history of the high yield market (i.e., since 1985), spreads generally lead default rates, and sharply rising spreads point to rising risk of recession. The spread-vs-default gap is pronounced right now, but if history is any guide, default rates will rise
- A history of credit cycles shows that investors should not wait for defaults to fall to buy credit; spreads rally substantially *before* that point in time. As shown below, spreads peaked during the S&L, Tech and Global Financial Crisis periods when only 55%, 76% and 30% of defaults had occurred. However, buying high yield before *any* increase in defaults would have been a very aggressive stance to take. For another take on bottom-fishing in high yield, see Appendix I

Time capsule: in the past, it made sense to buy credit before defaults peaked, but not before they began



 One approach in credit is to estimate default and recovery rates, and determine the minimum spread required to compensate for implied losses. If current spreads are higher than the minimum spread, credit presumably offers good value. However, if liquidity conditions are substantially changing, which the first six Acts of this paper suggest is happening, an additional cushion is needed to compensate investors. This is similar in principle to the extra compensation required by private equity investors when comparing returns to liquid public equity markets

Given this backdrop, what makes the most sense to me is an active approach with a flexible mandate rather than an index-based approach, and allowances for managers to short securities as well as buy them.

What could managers with spare ammunition be looking at in credit markets right now?

For bonds trading above 80 cents on the dollar, some managers are combing through the universe of non-energy issuers to look for select companies whose 2-3 year bonds are trading at yields of 8%-12%. This is of course an exercise in underwriting risk at a time of low revenue and economic growth in US, with continued headwinds in the form of a strong dollar. For investors, this represents an opportunity to step in and provide liquidity at a time when it is scarce.

For bonds trading below 80 cents on the dollar, distressed managers are not confined to just looking at Energy and Materials. While these two sectors make up more than half of the "distressed" bond and loan universe, there are many distressed securities linked to other sectors.



Here are a few examples of positions that relative value credit hedge fund managers are executing:

Capital structure trades

- Long a low dollar price long-maturity bond of an investment grade cyclical company (priced perhaps at 70 cents on the dollar), hedged with the purchase of 5-year default protection on the same company. The goal: reaping gains should the company either default or recover sharply
- A long position in senior debt, and a short position in junior debt in the same company. The goal: benefit in the case of a credit event (or its increased likelihood), since markets are often too optimistic on recovery values

Arbitrage trades

• Purchase of closed-end bond and leveraged loan funds trading at a discount to net asset value, hedged with exchange traded funds. The goal: benefit from potential convergence of net asset value with hedges

Structured credit trades

• As in 2008-2009, the spread on BB and BBB-rated collateralized loan tranches is widening faster than spreads on like-rated loans themselves. There is no free lunch in structured credit; if defaults rise close to a security's level of credit enhancement and subordination, its price will fall more rapidly than on underlying loans. The goal: determine which structured credit positions are oversold relative to their ultimate default experience

How credit hedge fund managers have positioned for 2016

We categorize credit hedge fund managers into three types: directional managers that are mostly long the market; managers with both long and short exposures that typically have low net exposures; and distressed managers buying securities at low dollar prices. We spoke to a number of managers across these three categories and aggregated their gross, net and long exposures. As 2015 came to an end, they were cutting exposures as conditions deteriorated. The sense we have is that they are preparing for a more volatile 2016, and prefer to preserve ammunition for compelling opportunities that may arise. The final chart shows aggregate cash balances for the directional and distressed managers²¹.





Source: J.P. Morgan Asset Management. December 2015.

Dynamic low net credit hedge funds Fund exposure (both axes)



Source: J.P. Morgan Asset Management. December 2015.

Cash balances



²¹ For directional and distressed managers, cash balances are a good measure of their risk appetite. For low net relative value funds, gross vs. net exposure is a better measure of risk appetite and positioning.

Appendix I: Bottom-fishing in high yield bonds during the financial crisis of 2008-2009

It can be tempting to dive back into high yield once spreads widen. As shown on page 12, spreads tend to peak well before the peak in defaults. However, investors can be also too early during periods of sharply rising spreads. Consider the global financial crisis. Spreads ranged from 300 to 400 bps from 2004 through mid-2007. In mid-2007, they began to widen and kept on rising all the way through October of 2008 when they hit 1,500 after the GSEs were put into conservatorship. For many investors, these were the highest spreads they had ever seen. How good an investor would someone have to be in October 2008 if the goal was to buy securities whose prices had bottomed?

As shown in the chart, only 15% of all high yield bonds had bottomed by October 2008. A month later in November 2008, when spreads rose to 1,900 bps, almost half of the market had bottomed. As a result, a bit more than half of all high yield bonds had not seen their lowest prices yet. If investors wanted a 75% probability of being able to buy a bond whose price had bottomed, they would have had to wait until February 2009, when spreads on the overall market were already declining.

The point here is that rising spreads can be tempting, but if investors jump in too soon, they need to be prepared to see prices continue to drop before they eventually stabilize, even when underwriting the right credits.



High yield spreads and cumulative percentage of bonds whose prices had bottomed % of overall market Spread, basis points

Source: J.P. Morgan Securities LLC, Barclays, Bloomberg, JPMAM. January 2016.

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