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Corporate Defaults and Recoveries - US

The changing face of defaults – distressed exchanges and re-defaults

Failed DEs may reshape default, recovery patterns in next downturn

» **Distressed exchanges became more prevalent during the last crisis and never left.** The mix of defaults has changed over the years as distressed exchanges (DEs) became a go-to restructuring tool for many companies during the default cycle tied to the 2008-2009 recession. Between 2009 and 2017, DEs accounted for 41% of tracked defaults among US non-financial corporates, first spiking during the credit crisis and again during the energy downturn in 2015-2016. DEs may very well be here to stay because their main drivers remain: the significant PE ownership of high-yield companies; cost-effectiveness compared to in-court restructurings; weak debt covenants; senior lenders' incentives; and better overall recovery prospects.

» **Re-defaults are rising, fueled by failed DEs.** The rate of re-defaults is increasing, as more and more companies that consummated DEs end up in bankruptcy. The overall re-default rate of US non-financial corporates between 1987 and 2017 now stands at 23%, versus the 18% we calculated for a report published November 2015. Our study of 30 years worth of default history suggests that, 41% of the time, distressed exchanges did not shore up the capital structures of struggling companies enough to stave off another default — be it a bankruptcy or another round of DEs.

» **The next default cycle may produce a spate of re-defaults.** We expect the US speculative-grade default rate to remain low at just 2% a year from now. However, lower-rated companies with weak liquidity and fragile balance sheets, especially those that previously defaulted in one way or another, could do so again once credit conditions weaken. Historically when the default rate is rising, re-defaults rise proportionately.

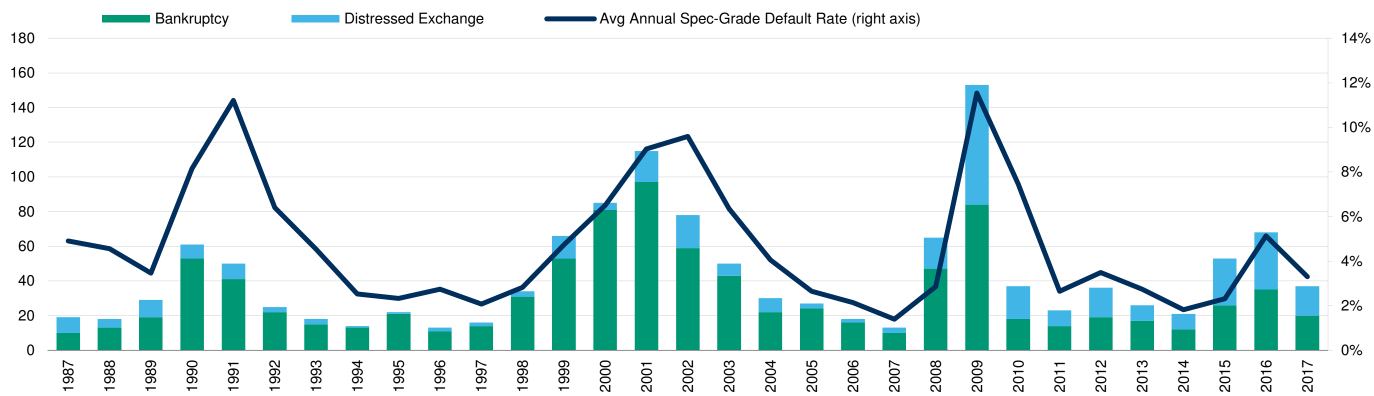
» **In re-default scenarios, unsecured creditors suffer the most losses.** Firm-wide recoveries of companies that went through several rounds of bankruptcies and DEs are not significantly different from the long-term average derived from more than 1,100 defaults recorded in Moody's Ultimate Recovery Database (1987-2017). However, in a re-default, recoveries for junior debt tranches, such as for Senior Unsecured and for Subordinated bonds, are lower than the historical average.

» **Defaults for oil & gas exploration & production (E&P) companies operating in a severely stressed industry can provide some insights into default and recovery patterns in the next cycle, regardless of timing.** More than half of the E&P companies that consummated DEs — often swapping unsecured bonds for new secured debt at a significant discount, in an attempt to mend unsustainable capital structures — filed Chapter 11 bankruptcy within a year of completing their out-of-court restructuring. The recovery patterns of creditor classes in such re-default scenarios may provide some insights into recovery trends in the next downturn.

Distressed exchanges more prevalent since the last default cycle

The mix of defaults has changed, as distressed exchanges (DEs) became much more commonplace during the cycle that followed the "Great Recession" and have remained a "go-to" restructuring tool for many companies ever since. DEs surged in 2009 and have remained a hefty share of total defaults. Between 2009 and 2017, on average, DEs accounted for 41% of tracked US non-financial corporate defaults, first spiking significantly during the credit crisis and then again during the 2015-2016 energy downturn. This compares with a much smaller 16% share between 1987 and 2008. Bankruptcies averaged approximately 74% of the total defaults recorded between 1987 and 2008, but account for only about half of the defaults between 2009 and 2017 (see Exhibit 1).

Exhibit 1
Share of DEs surged during credit crisis and still remain frequent



Source: Moody's

DEs are intended to buy time until improvement in the company's operating conditions, industry conditions, or in the macro environment make a bankruptcy unnecessary. When successful, they can help overleveraged firms reduce debt enough to stay solvent and avoid bankruptcy. But, they can also help preserve value simply by pushing off a bankruptcy from the depths of a default cycle to a more benign environment, which frequently improves the overall loss given default (LGD). This proved helpful during the 2008-2009 default cycle, which was relatively short compared with others.

We expect distressed exchanges to continue to be an important debt restructuring tool, because their main drivers remain in place. These include the significant presence of private equity (PE) sponsors as owners of high-yield companies; cost-effectiveness when compared with in-court restructurings that involve many more lawyers and advisers; continued weakening of corporate debt covenants; better overall recovery prospects when compared to bankruptcies; and the incentives for senior bank lenders, who are often in a better position after distressed exchanges are consummated.

Why is this important? DEs tend to have a higher firm-wide recovery rate, as they rarely target all of the company's funded debt, so one or more tranches, normally the most senior debt facilities, usually don't default. Specific types of debt are targeted more often in distressed exchanges (see Exhibit 2).

Exhibit 2

DEs affecting senior unsecured and subordinated bonds are the most common

Type of Debt	Number of times this debt was targeted in a DE *	%of 199 DEs where this type of debt was impacted
First-Lien Bank Debt	22	11%
Junior Bank Debt	15	8%
Sr. Secured Bonds	32	16%
Sr. Unsecured Bonds	100	50%
Subordinated Bonds	84	42%

Note: In the majority of instances where bank debt was impacted, lower-ranked bond facilities were restructured as well; Junior Bank Debt = second lien, unsecured, secured by equity loans
*The "Number of times this debt was targeted in a DE" adds up to greater than 199 (i.e. the number of analyzed DEs) and the "% of 199 DEs where this type of debt was impacted" adds up to greater than 100% to reflect a number of DE's that targeted more than one type of debt.
Source: Moody's Ultimate Recovery Database

Given how differently debt classes are treated in distresses exchanges it is clear that, as the percentage of DEs increases, there is more of a disconnect between default rates and the overall expected loss. This is even more exaggerated among the senior secured debt tranches, which don't tend to experience a default in a DE scenario. Out of 199 recorded DEs in Moody's Ultimate Recovery Database (URD), only 11% had first-lien bank debt restructured — if we add junior bank debt to this group, the percentage increases to 19%. Unsurprisingly, the vast majority of DEs involved senior unsecured or subordinated bonds.

Re-defaults are rising, fueled by failed DEs

The rate of re-defaults is increasing, as more and more companies that consummated DEs end up in bankruptcy. The overall re-default rate of US non-financial corporates between 1987 and 2017 stands at 23%, versus 18% calculated in prior research we published in November 2015 (Distressed Exchanges Remain Frequent Thanks to Oil and Gas, PE Firms).

Our study of 30 years worth of default history suggests that, 41% of the time distressed exchanges did not shore up the capital structures of struggling companies enough to stave off another default — be it a bankruptcy or another DE.

Exhibit 3

Fourty-one percent of consummated DEs did not stave off a subsequent default
1987-2017

total DE universe 1987 - Dec 2017	345	
re-defaulted % (both BKs/ DEs)	141	**41%**
re-defaulted % as BKs	97	28%
re-defaulted % as DEs	44	13%
one-time DEs (no subsequent default on record)	152	**44%**

Note: we excluded DEs preceded by a bankruptcy or a missed interest payment from our cohort of one-time DEs
Source: Moody's

For the period covered by the data we tracked between 1987 and 2017, "Chapter 22s" (a restructuring industry term for a second Chapter 11 bankruptcy), remain the most typical form of subsequent debt restructuring at almost half of all re-defaults (see Exhibit 4).

Exhibit 4

Initial and subsequent defaults 1987-2017

	Subsequent default	
Initial default	Bankruptcy	Distressed Exchange
Bankruptcy	148	13
Distressed Exchange	97	44
	As % of total	
	49%	4%
	32%	15%

Source: Moody's

However, if we focus on the current benign default cycle, covering the period from September 2010 through year-end 2017, then there is a marked change in re-default behavior. Classic Chapter 22s are replaced by companies that initially attempted to avoid or delay that bankruptcy via a distressed exchange and later re-defaulted (see Exhibit 5).

Exhibit 5

Bankruptcies preceded by a DE dominate among re-defaults in the current benign cycle (Sept. 2010 - 2017)

	Number of defaults	% of total
Bankruptcy preceded by DE	43	47%
"Chapter 22"	24	26%
DE preceded by DE	24	26%
Bankruptcy followed by DE	1	1%
Total Re-Defaults	92	

These re-defaults were preceded by at least one instance of a default at any point between 1987- 2017

Source: Moody's

A spate of re-defaults in the next default cycle is a possibility

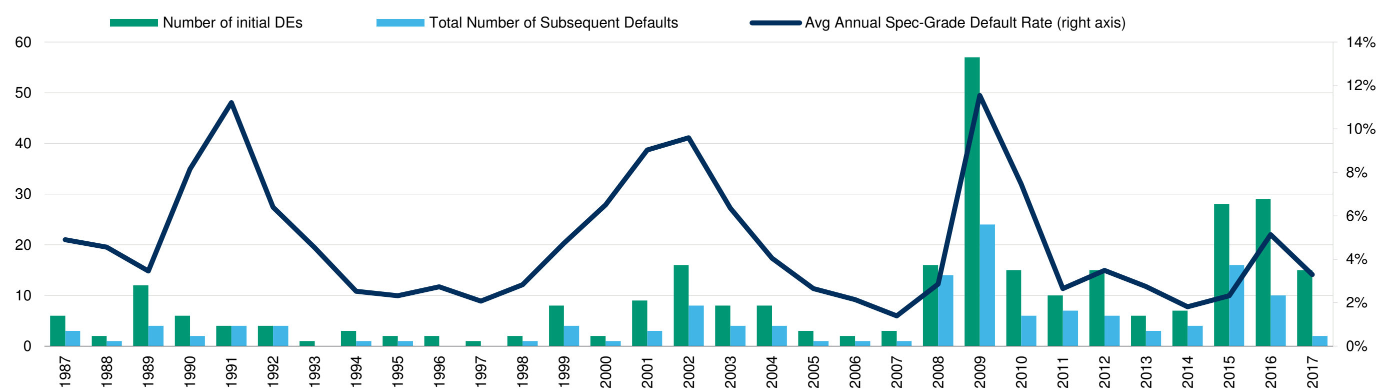
We expect the US speculative-grade default rate to remain low, at just 2% a year from now. However, lower-rated companies with weak liquidity profiles and fragile balance sheets, especially those that previously defaulted via a DE or bankruptcy, could do so again, once credit conditions weaken. Companies that need to restructure their balance sheets, especially ones owned by PE sponsors, will continue to employ DEs and steer clear of bankruptcies, while markets remain accommodating. This raises the specter of potential re-defaults when market conditions turn.

It takes an average of a little over three years between the initial and subsequent defaults, therefore, some of the companies that completed distressed exchanges and did not manage to significantly improve their intrinsic liquidity or reduce their debt burden, could come under pressure if credit conditions deteriorate. Meanwhile, companies completing DEs now could face distress around the time the next downturn is developing.

Historically when the default rate is rising, re-defaults rise proportionately (see Exhibit 6). This indicates that when credit cycles turn, highly-leveraged companies with fragile balance sheets and weak liquidity profiles will re-default, if their DEs during a benign credit cycle did not fundamentally fix their credit profiles.

Exhibit 6

Increase in DEs contributes to subsequent re-defaults, exacerbated in peak default cycles



Source: Moody's

In re-default scenarios, unsecured creditors suffer the greatest losses

Although firm-wide recoveries of companies that went through several rounds of bankruptcies and DEs are not significantly different from a long-term average derived from more than 1,100 defaults recorded in Moody's URD (1987-2017), recovery performance of junior debt tranches such as Senior Unsecured and Subordinated bonds in a re-default scenario is worse than historical average.

Exhibit 7

Junior debt tranches recover poorly in a repeat default scenario

default resolutions (1987-2017)

	Repeat Defaults		URD (1987-2017)	
	DEs	BKs	DEs	BKs
Firm-Wide Recovery	**67%**	**56%**	**72%**	**51%**
Bank Debt	98%	83%	96%	77%
Senior Unsecured Bonds	75%	23%	71%	40%
Subordinated Bonds	62%	15%	65%	20%

ultimate recovery includes non-defaulted tranches in cases of DEs

Source: Moody's Ultimate Recovery Database

Out of 143 repeat defaults we reviewed, 87% of the total were bankruptcies, on average recovering 56% on a firm-wide level. The latter percentage is slightly above a historical average of 51%. It is also interesting to note that, an average firm-wide recovery of 59% for subsequent bankruptcies emerging during the Great Recession default cycle ended up higher than a historical average, and almost on par with 60% realized by bankrupt companies exiting bankruptcies outside of default cycles. This trend can be explained by supportive policies of central banks propping up markets with massive injections of liquidity, thus shortening the duration of the recent default cycle by more than half.

Exhibit 8

Firm-wide ultimate recoveries of repeat bankruptcies were highest during last default cycle

(By year of emergence)

	Initial BK	Counts	Repeat BKs	Counts	one-time BKs	counts
Cycle (Dec 31,1989-Dec 31, 1992)	54%	8	47%	10	46%	60
Cycle (Jul 31, 1999-Mar 31, 2004)	44%	37	58%	19	44%	242
Recession (Dec 31, 2008-Aug 31, 2010)	32%	8	59%	14	52%	85
Post-Recession	36%	9	51%	39	54%	73
Outside of 2 Default Cycles Before Recession	56%	50	60%	44	55%	247
Total	**49%**	**112**	**56%**	**126**	**50%**	**707**

Source: Moody's Ultimate Recovery Database

However, re-defaults have a higher incidence of liquidations. Of the 245 companies where the re-default was a bankruptcy filing, 43% were liquidated. That figure is twice as high as the 21% of the 880 bankruptcies that didn't re-default between 1987 and 2017.

This compares unfavorably to an analysis of the 29 repeat bankruptcies from the URD, that took place between 1987-2017 and resulted in a liquidation. And these liquidated companies realized a higher than average firm-wide recovery rate of 64%, with almost two-thirds of these defaulters going out of business and selling their assets outside of the three default cycles that we distinguish for the purpose of this study. The latter default-recovery behavior is not surprising, since companies tend to realize a higher value from liquidated assets in a more benign market environment, and as a result pay off more of their creditors' claims.

What's important to put in context is that firm-wide recoveries are influenced by the type of default, and by the timing of the default cycle.

Energy crunch defaults hint at how the next default cycle will play out

The recent default behavior of oil & gas exploration & production (E&P) companies operating in a severely stressed industry environment provides some insights into the next default cycle, regardless of its timing. More than half of the E&P companies that completed distressed exchanges in 2015 — often swapping senior unsecured bonds for new secured debt at a significant discount, in an attempt to mend unsustainable capital structures — filed Chapter 11 bankruptcy within a year, as we wrote in September in Lessons Learned: 2016's E&P Bankruptcies, What a Difference a Year Makes.

However, the strategy of completing a DE to stave off a bankruptcy until market conditions improved was effective in the sense it improved recoveries. As stated in the September report: Given the dismal recovery rates for the "15 from 2015" bankruptcies we analyzed, we were somewhat surprised by both the speed at which recovery rates turned around and by the overall level of recoveries from this "17 from 2016" group. Firm-wide recovery rates for the 17 E&P companies analyzed that declared bankruptcy in 2016 and emerged subsequently averaged 49.5%, up substantially from the catastrophic 21.4% firm-wide recovery rate of the 15 from 2015.

We reviewed three potential scenarios for unsecured creditors in E&P companies faced with the initial DE and found that it was often best to "take the money and run." We then looked at a broader set of DEs from various sectors between 1987-2017.

When the DEs were not effective, the scenario that yielded the highest recovery to the senior unsecured bond creditors was to accept the DE offer and cash out on the new facility, replacing the old SU debt right after the DE was completed (see Exhibit 9). Meanwhile, the worst outcome for SU bondholders was to not participate in a proposed DE and to hold on to their SU bond holdings all the way through the subsequent bankruptcy process, on average recovering 12 cents on a dollar, versus the historical average of 20 cents.

Exhibit 9

Scenarios for bond investors in companies that completed DEs and still ended up in bankruptcy

DEs where senior unsecured bondholders received cash/ senior secured facilities

	Before Bankruptcy	After Bankruptcy	
	Scenario 1	Scenario 2	Scenario 3
	If accepted DE offer & cashed out	If didn't participate in DE, kept SU bond stubs	If exchanged SU bonds during DE and stayed with new exchange facilities through BK *
Average	43%	12%	37%
Median	38%	6%	38%

*For those investors who exchanged their SU bond holdings for cash, recovery after BK exit = recovery estimated at the time of accepting cash during DE

Source: Moody's Ultimate Recovery Database

As for the companies that attempted to restructure their senior unsecured debt and did not end up in a bankruptcy, investors' best bet, on average, was to refuse a DE offer and hold on to their investment. But in this instance, we assume that investors can accurately predict a successful DE without a subsequent re-default to achieve this best case recovery outcome.

Exhibit 10

DEs that haven't re-defaulted

DEs where senior unsecured bondholders received cash/ senior secured facilities

	Scenario 1	Scenario 2	Scenario 3
	If accepted DE offer & cashed out	Took a DE offer and held its investment *	Didn't Take a DE Offer, held its investment as of now
Average	57%	66%	100%
Median	55%	59%	100%

* doesn't take into account market value of new exchange facilities

Source: Moody's Ultimate Recovery Database

Appendix: Moody's data sets

The ultimate recovery data for this analysis comes from Moody's Ultimate Recovery Database, which focuses on resolution information for bankruptcies and distressed exchanges consummated by US-domiciled non-financial corporates. Moody's Credit Strategy and Standards (CSS) team maintains a separate default database that includes information on payment defaults in addition to distressed exchanges and bankruptcies. In the instances where we talk about corporate family-level default counts, the data is sourced from CSS database.

There are no formal definitions for "re-defaults" so, for the purpose of this analysis, we included defaults that were at least six month apart. If both defaults were distressed exchanges less than one year apart, then to be included in the overall count of defaults, the two DEs had to involve different classes of debt.

For more details on Moody's approach to determining distressed exchanges, please see Distressed Exchanges on the Rise (May 2016). For additional research of DEs consummated between 1990-2016, please refer to A Closer Look at Distressed Exchanges (December 2017). The study focuses on the re-default behavior of DEs within three years of the initial debt restructuring; therefore the analysts followed the initial DE defaults consummated prior to 2014 to allow for seasoning.

Moody's definition of default does not include so-called "technical defaults," such as maximum leverage or minimum debt coverage violations, unless the obligor fails to cure the violation and fails to honor any resulting debt acceleration. Also excluded are payments owed on long-term debt obligations that are missed due to purely technical or administrative errors that are: 1) not related to the ability or willingness to make the payments, and 2) are cured very quickly (typically, one to two business days). Finally, in select instances, based on the facts and circumstances, missed payments on financial contracts or claims may be excluded if they result from legal disputes regarding the validity of those claims.

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» Corporate Defaults and Recoveries- US: Lessons Learned: 2016's E&P Bankruptcies, What a Difference a Year Makes, September 2017

» Corporate Defaults and Recoveries- US: Cov-Lite Loans Dominate the Market, Will See Worse Than Average Default Recoveries, May 2017

» Corporate Defaults and Recoveries - US: Lessons from a Trillion Dollars in Defaults, April 2017

» Corporate Defaults and Recoveries - US: Private Equity Tactics Keep Firm-Wide Recoveries Close to Average , November 2016

» Distressed Exchanges on the Rise,May 2016

» Corporate Defaults and Recoveries - US: Distressed Exchanges Remain Frequent Thanks to Oil and Gas, PE Firms, November 2015

» Corporate Defaults and Recoveries - US: What May Happen in the Next Default Cycle Given Falling Credit Quality, August 2015

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