

Make Whole Calls

Making the Right Call in the Low Yield Environment

Abstract

Make whole calls caused little investor concern until the low yield environment resulted in unexpected losses. Make whole provisions fail to protect short-term investors when bond spreads fall below make whole levels. Yield volatility in Treasury securities complicates matters and increases risk for cash investors.

Make whole bonds are generally not considered callable, and thus are difficult to identify. 27% of the issues in a popular short-term bond index may have make whole provisions. Industrial issues are 15 times as likely as financial names to use make wholes. The average make whole spread is 17 basis points among issues from the top 200 ranks.

Corporate cash investors should review their investment policies and treat make whole bonds as callable, avoid make whole spreads greater than 20, and perform break-even analysis.

Introduction

Life is full of contradictions, and sometimes contradictions can lead to unexpected losses. One such contradiction is a seemingly benign feature in corporate bonds called the "make-whole call." As the name indicates, investors are supposedly compensated, or made whole, in the event that the bond is called prior to maturity. In recent months, however, some unsuspecting corporate cash investors became victims of these calls. More calls may follow and could cause losses.

Based on the recent make whole calls, we can draw four general observations:

- 1. Many bondholders did not know that they owned callable bonds beforehand;
- 2. Issuers are calling bonds with make whole features more frequently;
- 3. Short-term investors are more likely to see losses than long-term investors; and
- 4. Calls may lead to losses when Treasury yields become more volatile.

Since publishing our research report, "Make-Whole Call Provisions," on October, 31, 2004, we have had a keen interest on the potential effects of make whole calls on corporate cash investors. When interest rates were higher, our primary concern was the reinvestment risk from call proceeds. In recent years, we noticed more frequent make whole calls from well-known issuers such as Exxon Mobil and Pfizer that led to losses for cash investors, a phenomenon not previously experienced.

Upon further study, we discovered that make whole provisions have become more popular with bond issuers. *However, these bonds are not generally considered callable bonds in bond analytics and bond indices, potentially leading to unwitting bondholders.* We hope that this research note will help raise the awareness in the corporate treasury community and help cash investors better handle the implications

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of make whole calls.

Make Whole Calls

A make whole call is a call option that allows the bond issuer to retire an outstanding bond at a "make whole" price no less than the par value (\$100.00). The make whole price, set at the time of the bond issuance, is meant to compensate the bondholders, making them whole, should the issuer retire the bond early. Like all options, the issuer has the option, but not the obligation, to exercise the call.

Make Whole Spread: Unlike traditional calls, which usually can be exercised at par value after a certain date, the make whole price is determined by taking the higher of two values: par value or a price determined by the make whole spread. The spread is generally at a punitive level to the issuer to discourage it from exercising the option. If it calls the bond, investors will benefit from this spread and get their principal back plus a handsome reward, or so the theory goes. Make whole calls can be exercised at any time prior to maturity.

For example, when MetLife Inc. issued its 6.75% seven-year bond in May 2009, it set a make whole spread of 50 basis points, or $0.50\%^{1}$. Its \$100.00 par value was based on a yield spread of 375 to a Treasury note of comparable maturity. Had MetLife immediately exercised the call, it would have had to call the bond at a price equivalent to a yield of 3.5% (6.75%-3.75%+0.50%). In bond math where prices move inversely to yields, this translates into an exercise price of \$119.98 (trust us on this one), or additional earnings of roughly 20% for bondholders.

Benefits: First introduced in the mid-1990s², make whole calls are now quite popular with corporate bond issuers, including the 2013 blockbuster deals from Verizon Communications and Apple Inc. They provide issuers with capital management flexibility such as changing the capital mix, extending debt maturities, and facilitating mergers and acquisitions. Since issuers generally pay an above-fair value price to exercise, investors welcomed them for higher total return potential.

Because of the punitive spreads to the issuers, make whole calls were rarely exercised for much of the last two decades. Perhaps for this reason, *make whole bonds are generally not considered callable bonds*, nor are they marked as such in bond reporting and analysis.

Risks Exposed by Low Yield

Unbeknownst to some bondholders, the inherent risk in make whole calls remained hidden when interest rates were higher and credit spreads wider. The current low yield environment serves to bring the risk to the surface.

The Premium Cost: As cash investors are aware, almost every bond, other than new issues, is currently traded at a premium, and premiums are generally worrisome for holders of callable bonds. A premium bond is one with a price above par value (\$100), where the yield is lower than the coupon interest rate. If a premium bond is called at par, bondholders could face negative returns.



We point this out because make whole calls promise to pay the higher of two prices, par or make whole. The declining interest rate environment resulted in prices of most bonds issued before 2009 to rise above par. So investors must look beyond par to the make whole price for principal protection.

Spreading Thin: When a bond is worth less than the make whole spread, or at a wider credit spread in bond lingo, the issuer has little incentive to pay more to call it. But when the credit spread is tighter than the "make whole" level, bondholders no longer will be made whole when the bond is called.

Earlier in their introduction, make whole spreads were customarily at 30 to 50 basis points. Compared to the 109 basis point average credit spread to Treasuries in the late 1990s, these levels were thought to provide adequate bondholder protection³.

Cash Investors at Risk: Absent other factors, a bond's perceived risk declines as it approaches maturity, and its spread to Treasury securities also narrows. *The make whole spread, thus, offers progressively less bondholder protection as time passes.* By the nature of their investments, cash investors are more at risk for problems with make whole calls than others as the natural buyers of bonds rolling down the yield curve. While earlier bondholders need not concern themselves with surrendering bonds at a substantial gain, cash investors may face negative total returns when market spreads fall through the "make whole" threshold.

Low Rate Exacerbation: The lack of high quality investments makes the matter worse by compressing corporate spreads to Treasuries, shrinking the safety margin of make whole spreads.

Figure 1 shows the generic six-month A-AAA rated corporate spreads to comparable Treasuries at year-end for the last 10 years from trading data compiled by Capital Advisors Group. The graph shows that since 2009, the typical 6-month corporate security has had a yield spread consistently below 20 basis points. It is reasonable to assume that bonds with make whole spreads above 20 bps face greater call risk when they roll into the six month maturity window.



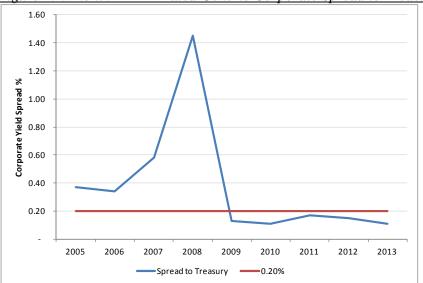


Figure 1: 6-month A-AAA Rated Generic Corporate Spread to Treasury

More Losses Possible: We suspect that cash investors may see more losses as issuers exercise calls to refinance into longer-maturity bonds before interest rates rise. As the call price is not a set price or yield, but one tied to the comparable Treasury yield, the recent increase in Treasury yield volatility presents a challenge to cash investors.

It is possible that, in aiming to lock in lower long-term yields, corporate issuers may call bonds nearing maturity at below market yield and above market price. Unlike traditional callable bonds, which generally have predetermined call dates, make whole bonds give the issuers the flexibility to call at any time.

For example, the two-year Treasury note yield varied from 0.20% on May 2, 2013 to 0.52% on September 5, 2013. Suppose that an investor bought a two-year bond at a 0.30% spread to Treasury on May 2^{nd} , s/he paid a price equivalent to a yield of 0.50% (0.30% + 0.20%). Assume that the bond has a 0.20% make whole spread and the issuer decided to call on September 5th, the yield at call would be 0.72% (0.20% + 0.52%). In this case, the investor gained 0.10% in spread compression (0.30% - 0.20%), but the price fell by an amount equal to 0.22% in yield terms (0.72% - 0.50%), which roughly amounts to \$440,000 on \$100 million (See Figure 2). This is an example of investors benefiting from the make whole spread compared to the par value, but losing on an absolute basis.

Source: Capital Advisors Group from trading data.



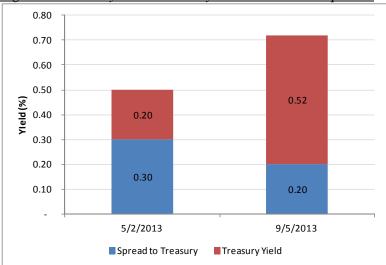


Figure 2: Treasury Yield Volatility and Make Whole Spreads

Source: A hypothetical example.

Make Whole Provisions Are Ubiquitous

As discussed earlier, the difficulty for investors is that the bonds are rarely, if ever, listed as callable. To find the ubiquitous and yet somewhat hidden calls in shortduration corporate bonds, we surveyed the 200 largest issues in the Merrill Lynch 1 to 3 Year A-AAA rated Corporate Index as of February 28, 2014. The bonds are from one utility, 44 financial, and 44 industrial issuers, representing 55% of the value of the index. We then reviewed each bond's characteristics on Bloomberg's Description screen.

27% of all Bonds Callable: We found that 54 of the 200 bonds are callable, 47 of which are industrial, 7 are financial and none are utility issues. They represent 37 issuers, 33 of which are industrial and 4 financial. We excluded all traditional callable bonds from the count. *In other words, 27% of non-callable corporate bonds may actually be callable.*

Industrials More Than Financials: The 47 callable industrial issues account for roughly 75% of the 63 industrial issues. The 7 callable financial issues, by comparison, were about 5% of the 135 financial issues. It is evident that industrial issues are more likely to have make whole provisions. *In fact, the likelihood of randomly stumbling on a hidden call in an industrial issue versus a financial one is roughly 15 times (75%/5%).*

Wide Spread Dispersion: We found the average make whole spread to be 17 basis points or 0.17%. The spreads on individual issues are as wide as 50 (Pfizer) or as narrow as 5 (Apple). In all cases, the spreads are substantially narrower than issuance spreads, an indication that call risk was quite remote at the time of issuance (See Figure 3).



I igure 5. Spread Dispersion of the 57 issues Subject to make thiote et								
	Make Whole	At Issuance						
Average	17	92						
Minimum	5	15						
Maximum	50	345						

Figure 3: Spread Dispersion of the 54 Issues Subject to Make Whole Calls
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Source: Merrill Lynch Global Index System.

Coping with Make Whole Provisions

Make whole provisions are ubiquitous but largely ignored by the larger fixed income community because of the supposedly beneficial features. Cash investors, on the other hand, often fall victim to calls as bonds approach maturity, especially in a low but rising yield environment. Below are a few suggested steps for corporate cash investors to consider.

Review and Define Investment Guidelines: Many corporate investment policies allow callable bonds, which may provide flexibility and value. However, guidelines should include make whole calls in the callable category, even though the bonds may be harder to identify. Excluding bonds with make whole provisions may be both unnecessary and impossible for corporate mandates, as they are more of the norm than the exception in newly issued bonds, especially non-financial issues.

Focus on the Make Whole Spread: We advise investors to avoid bonds with wide spread levels. For example, <u>Figure 4</u> shows the distribution of spreads among the 54 issues by remaining maturity. To strike a balance between corporate supply and call risk, it may be advisable to avoid bonds with make whole spreads wider than 20.

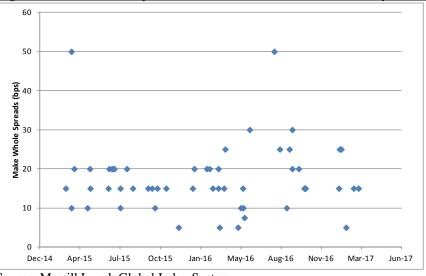


Figure 4: Distribution of Issues with Make Whole Provisions by Maturity

Source: Merrill Lynch Global Index System.

Break-Even Analysis: In a volatile and rising interest rate environment, investors may not be immune from call risk even with a tight make whole spread. The backup in Treasury yield may more than offset the spread cushion at the time of call. It may be



necessary to conduct scenario analysis of Treasury yield movement within the maturity period. For example, assume a bond with six months remaining to maturity is trading at 30 basis points to Treasuries and the make whole spread is 10. The investor will be safe if either spread compression or Treasury yield widening is less than 20 basis points. Because the two values often do not move in lockstep, there may be leeway to allow a margin greater than 20. Note that this analysis does not necessarily protect bondholders from an issuer overpaying to call an outstanding issue.

Conclusion: Making the Right Call on Make Whole Calls

Make whole calls caused little investor concern until recently, when some calls resulted in negative total returns due to the low yield environment. Designed to offer issuer flexibility when interest rates were higher, make whole provisions fail to protect shortterm investors when bond spreads fall below the make whole levels. Yield volatility in Treasury securities, on which make whole spreads are based, complicates matters and increases risk to cash investors.

Make whole bonds may catch investors by surprise as they were generally not considered callable, and there is no simple method in bond literature to help identify them. Meanwhile, make whole features became more popular with issuers in recent years, such that 27% of the issues in a popular short-term bond index have such provisions. Issues from industrial names are 15 times as likely as financial names to use make whole provisions. The make whole spreads vary from 5 to 50 basis points, with an average of 17 basis points.

Given the ubiquitous nature of make whole call options and the challenge of the low yield environment, we encourage corporate cash investors to review their investment policies and include make whole calls in the callable category, refrain from buying bonds with make whole spreads greater than 20, and frequently perform break-even analysis in anticipation of Treasury yield volatility. While it may be impossible to avoid bond calls, it is incumbent upon the cash investors to make the right call on make whole calls.



Appendix: Corporate Issues with Make Whole Provisions

(From Merrill Lynch 1-3 Year A-AAA Rated Corporate Index as of February 28, 2014)

Description	Ticker	Coupon	Maturity	Rating	Sector	Face Value	Price	ΥTM	OAS	MWSprd	IssurSprd
MERCK & CO INC	MRK	4.750	3/1/2015	AA3	Industrials	1,000	104.40	0.33	20	15	78
MEDTRONIC INC	MDT	3.000	3/15/2015	A1	Industrials	1,250	102.82	0.28	13	10	60
PFIZER INC	PFE	5.350	3/15/2015	AA3	Industrials	3,000	105.00	0.52	37	50	340
VOLKSWAGEN INTFN	VW	1.625	3/22/2015	A3	Industrials	1,250	101.01	0.67	52	20	113
NOVARTIS CAPITAL	NOVNVX	2.900	4/24/2015	AA3	Industrials	2,000	102.95	0.32	15	10	N/A
NBCUNIVERSAL MED	CMCSA	3.650	4/30/2015	A3	Industrials	996	103.64	0.51	34	20	N/A
UNITED TECH CORP	UTX	4.875	5/1/2015	A2	Industrials	1,200	105.03	0.55	38	15	68
METLIFE INC	MET	5.000	6/15/2015	A3	Financial	1,000	105.72	0.54	36	15	92
TOYOTA MTR CRED	ΤΟΥΟΤΑ	3.200	6/17/2015	A1	Industrials	1,250	103.60	0.41	22	20	120
TOTAL CAPITAL	TOTAL	3.000	6/24/2015	AA2	Industrials	1,250	103.39	0.41	22	20	110
SHELL INTL FIN	RDSALN	3.100	6/28/2015	AA2	Industrials	1,750	103.62	0.36	17	20	110
MERCK SHARP	MRK	4.000	6/30/2015	AA3	Industrials	1,000	104.66	0.48	29	20	137.5
ANHEUSER-BUSCH	ABIBB	0.800	7/15/2015	A2	Industrials	1,500	100.52	0.42	22	10	50
GENENTECH INC	ROSW	4.750	7/15/2015	AA2	Industrials	1,000	105.78	0.52	32	15	N/A
DAIMLER FINANCE	DAIGR	1.300	7/31/2015	A3	Industrials	1,500	100.83	0.71	51	20	108
AT&T INC	Т	2.500	8/15/2015	A3	Industrials	2,250	102.74	0.61	40	15	77
SHELL INTL FIN	RDSALN	3.250	9/22/2015		Industrials	1,000	104.45	0.39	15	15	90
TOTAL CAPITAL	TOTAL	3.125	10/2/2015		Industrials	1,300	104.30	0.40	16	15	75
GEN ELECTRIC CO	GE	0.850	10/9/2015	AA2	Industrials	2,000	100.61	0.47	21	10	55
MORGAN STANLEY	MS	5.375	10/15/2015		Financial	2,112	107.20	0.89	64	15	97
ABBVIE INC	ABBV	1.200	11/6/2015	A3	Industrials	3,500	101.00	0.60	32	15	N/A
COSTCO COMPANIES	COST	0.650	12/7/2015	A1	Industrials	1,200	100.41	0.42	11	5	35
DAIMLER FINANCE	DAIGR	1.250	1/11/2016		Industrials	1,250	100.72	0.86	52	15	90
ORACLE CORP	ORCL	5.250	1/15/2016	A1	Industrials	2,000	108.62	0.61	28	20	N/A
WYETH	PFE	5.500	2/15/2016		Industrials	1,000	109.34	0.68	32	20	, N/A
CISCO SYSTEMS	CSCO	5.500	2/22/2016		Industrials	3,000	109.68	0.56	20	20	95
HOME DEPOT INC	HD	5.400	3/1/2016		Industrials	3,000	109.53	0.60	23	15	75
TOTAL CAPITAL	TOTAL	2.300	3/15/2016		Industrials	1,000	103.55	0.55	16	15	90
COMCAST CORP	CMCSA	5.900	3/15/2016		Industrials	1,000	110.16	0.86	48	20	132
GLAXOSMITHKLINE	GSK	0.700	3/18/2016		Industrials	1,250	100.11	0.65	25	5	35
SANOFI-AVENTIS	SANFP	2.625	3/29/2016		Industrials	1,500	104.27	0.56	15	15	70
NBCUNIVERSAL MED		2.875	4/1/2016		Industrials	1,000	104.18	0.85	44	25	N/A
APPLE INC	AAPL	0.450	5/3/2016		Industrials	1,500	99.88	0.51	6	5	20
PEPSICO INC	PEP	2.500	5/10/2016		Industrials	1,000	103.70	0.79	34	10	57
AT&T INC	T	2.950	5/15/2016		Industrials	1,750	104.45	0.90	45	15	97
TEXAS INSTRUMENT	TXN	2.375	5/16/2016		Industrials	1,000	103.70	0.68	23	10	60
GOOGLE INC	GOOG	2.125	5/19/2016		Industrials	1,000	103.48	0.54	8	7.5	43
METLIFE INC	MET	6.750	6/1/2016		Financial	1,250	112.95	0.92	46	30	375
BANK OF AMER CRP	BAC	6.500	8/1/2016		Financial	3,432	112.62	1.19	67	50	330
AT&T INC	T	2.400	8/15/2016		Industrials	1,500	103.29	1.04	50	25	148
COCA-COLA CO/THE	KO	1.800	9/1/2016		Industrials	1,646	102.60	0.75	20	10	N/A
AMERICA MOVIL SA	AMXLMM	2.375	9/8/2016		Industrials	2,000	103.30	1.04	48	25	158
TOYOTA MTR CRED	ΤΟΥΟΤΑ	2.000	9/15/2016		Industrials	1,500	103.08	0.77	20	20	130
DAIMLER FINANCE	DAIGR	2.625	9/15/2016		Industrials	1,100	103.90	1.06	49	30	
INTEL CORP	INTC	1.950	10/1/2016		Industrials	1,500	103.04	0.76	17	20	
CONOCPHILLIPS CA	СОР	5.625			Industrials	1,250	112.29	0.70	28	15	87
SIEMENS FINAN	SIEGR	5.750	10/13/2010		Industrials	1,750	112.25	1.04	45	15	85
MORGAN STANLEY	MS		10/17/2010		Financial	1,354	111.43	1.31	71	15	N/A
MORGAN STANLEY	MS	5.450	1/9/2017		Financial	2,326	111.45	1.51	71	15	N/A
			1/9/2017								
BANK OF MONTREAL		2.500			Financial Industrials	1,500	104.21	1.00 1.09	30 40	25 25	170
		6.500	1/15/2017			1,000	115.27				143
ANHEUSER-BUSCH	ABIBB	1.125	1/27/2017		Industrials	1,200	100.42	0.98	26	15	30
OCCIDENTAL PETE	OXY	1.750	2/15/2017	AZ	Industrials	1,250	101.71	1.16	42	15	95



¹ The MetLife Inc. bond due 6/01/2016 with a coupon of 6.75% was issued on 5/29/2009. The comparable Treasury note had a 2.625% coupon due 4/30/2016. The 375 basis point issuance spread and 50 basis point make whole spread are from the Bloomberg Description page.

² The first public make whole call bond was said to be a 15-year bond with an 8.125% coupon from Harvard University, according to an academic research paper "The Life Cycle of Make-whole Call Provisions," by Scott Brown and Eric Powers on September 8, 2012.

³ The average monthly option-adjusted spread (OAS) of investment grade corporate bonds was 109 basis points (or 1.09%) based on the Merrill Lynch US Corporate Master index between 1996 and 2000.



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