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North America

Re-leveraging Corporate America, Part 1

Well, some parts anyway…

- **On Average Leverage is on the Rise, but Barely:** With urgency to protect balance sheets waning a bit and borrowing costs at all-time lows, we find that leverage for the typical non-financial name in the high-grade space is creeping higher on average – but only at a subdued pace.

- **Median is Very Different than Mean:** But does the average reflect what the *typical* corporate manager is doing? Perhaps not, in our view. Leverage trends in the context of median rather than average show that for some companies debt may be increasing more dramatically than many realize.

- **Significant Variance by Sector:** Of course, leverage trends can and do vary dramatically across sectors. In most cases, debt growth has kept pace with increased profit or cash reserves, but we do find some outliers to this trend.

- **Screening for LBO Candidates:** LBOs are back in the news, and we examine which companies "screen well" for a potential LBO. We encourage investors to contact us directly to discuss in more detail or for the screen itself.

- **Trade Ideas:** We highlight three trade ideas: (1) long / short basket based on changing leverage profiles, (2) sector rotation based on compensation per unit of leverage, and (3) LBO candidates with meaningful widening potential.

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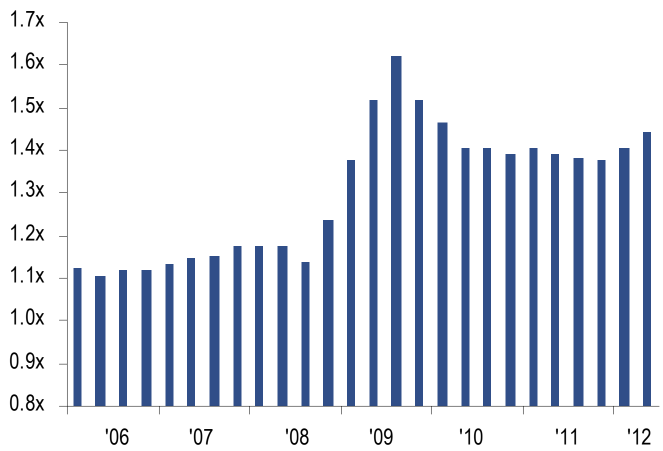
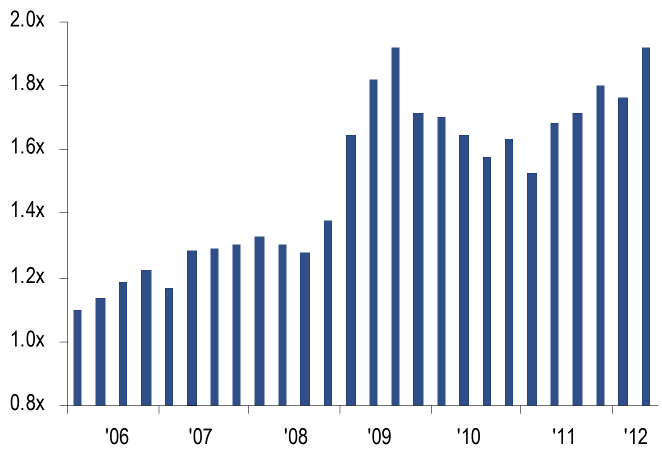
Figure 1. Leverage of the AVERAGE benchmark non-financial high-grade credit, 2006-12



Source: Citi Research, Bloomberg
Note: As of Q2 2012; based on 274 ex-fin, ex-util HG names; leverage defined as average LTM total debt over average LTM total EBITDA

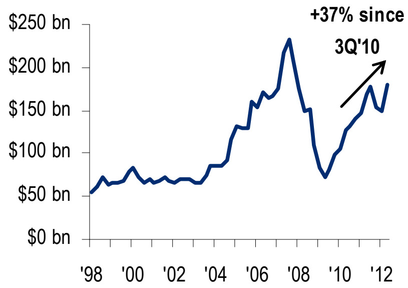
Figure 2. Leverage of the MEDIAN benchmark non-financial high-grade credit, 2006-12



Source: Citi Research, Bloomberg
Note: As of Q2 2012; based on 274 ex-fin, ex-util HG names; leverage defined as median LTM total debt over median LTM total EBITDA

Re-leveraging Corporate America, Part 1

Figure 3. Shareholder-friendly activities (buybacks & dividends) on the rise…



Source: Citi Research, S&P
Note:As of Q2 2012, based on S&P 500 constituents

While corporate managers have largely been focused on protecting their balance sheets since the Lehman crisis, the urgency to do so may be waning somewhat (Figure 3). In this article we examine corporate re-leveraging, and our take is that while leverage is creeping a bit higher on average, it is not increasing at a particularly worrisome pace yet. That said, in some segments of the corporate market it is increasing rapidly, perhaps faster than many realize.

In this article we examine leverage from five different vantage points. We begin by calculating leverage for the typical name in the high-grade space, based on a sample of about 275 non-financial benchmark issuers. We then examine why leverage, on average, has only been gradually ticking higher in recent quarters, rather than increasing rapidly. In the third section we examine leverage at the sector level. And with LBOs back in the news, in the fourth section we take a look at what names screen well. Lastly, we highlight three trade ideas around these themes.

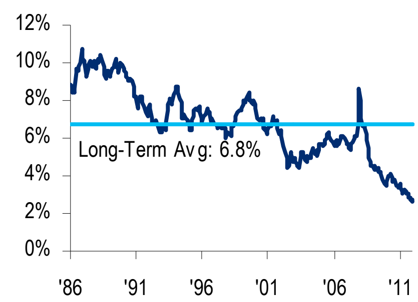
A few caveats with regard to our sample before we begin: (1) we consider names that held an investment grade rating for the bulk of the 2006-12 period, and therefore the effect of LBO'd credits and rising stars is understated; (2) we limit the universe to non-financial benchmark issuers and therefore do not capture de-leveraging in the banking sector; (3) for simplicity, all calculations are based on unadjusted Bloomberg data so factors that may be considered to be debt in a practical sense (e.g., leases) are not captured; and (4) names must have data for each quarter during the 2006-12 period to be included.

1. Leverage on the rise, but barely

In Figure 1 (cover page) we present leverage for the average company, and we see that it has been ticking modestly higher in recent quarters (from 1.38x in Q3 ’11 to 1.44x in Q2’12). This move should not be all that surprising given that by some metrics the market has never been more open to issuers. The cost of debt, for example, is at all-time lows; Figure 4 shows that the yield for the typical name is now 2.7%, relative to a long-term average of 6.8%. At current levels higher debt balances only modestly impact net income and coverage ratios for many issuers.

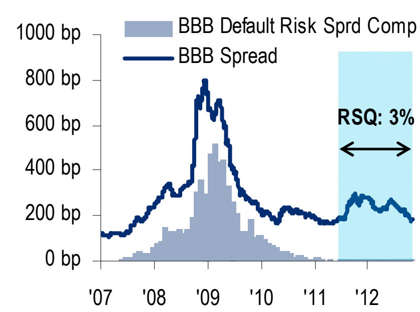
As for the desire of corporate managers to take advantage of low rates, there is obviously some wariness after ‘08. But with default risk at historically low levels this mentality may be fading a bit. For example, our internal models suggest that default risk for the typical HG name is now only 0.15%. Other metrics, such as forward-looking rating transition matrixes, also suggest very modest default risk (Figure 5). The R-squared between triple-B spread and projected default risk is only 3%.

Figure 4. Yield for the typical HG non-fin company at all-time lows



Source: Citi Research
Note: As of November 6, 2012

Figure 5. Default risk is negligible by many metrics



Source: Citi Research, Moody’s
Note: As of November 2, 2012

Key point: Leverage for the *average* company is creeping higher. But despite all-time low borrowing costs, it is increasing at a subdued pace.

Side note: How much can 0.5x add to ROE?

Should the typical high grade company lever up to placate equity investors in a slow growth environment? The typical company in our sample is currently levered about 1.4x on average and is generating an ROE of 15.4%. How would ROE change if the typical company decided to add another 0.5x of leverage and used the cash to take out equity? For the average credit, a half a turn increase in leverage equates to about $2.4 bn of debt. For simplicity, if we assume that equity will decline by the same amount (i.e., book and market values are equal), we find that ROE increases by over 3% (Figure 6). Not too shabby…

Figure 6. ROE impact of using debt to repurchase shares

	Current Profile	*VS.*	After +0.5x Lev	Change
Avg Total Debt	$6,863 mm		$9,239 mm	+$2,376 mm
Leverage	1.4x		1.9x	+0.5x
Avg Net Income	$1,906 mm		$1,862 mm	-$44 mm
Avg Equity	$12,380 mm		$10,004 mm	-$2,376 mm
ROE	15.4%		18.6%	+3.2%

Source: Citi Research, Bloomberg
Note: As of 2Q ’12; 30% tax rate and 2.7% cost of debt assumed; equity book and market value are assumed equal

2. But median is very different from the mean

Over the past two years debt has risen 16% for the average company, compared to an EBITDA increase of 13%, essentially keeping pace (Figure 7). Again, given the historically low borrowing rates, why aren't issuers more aggressively increasing leverage?

One key reason is that many issuers — namely very large ones — still want to "protect the balance sheet." For example, in Figure 8 we highlight how debt has changed over the past two years for the 10 largest non-financial issuers (measured by debt amount outstanding in 2010), names that include AT&T and Walmart. These issuers account for about 30% of the overall market (in 2010), and as such they drive the *average*. Note that the majority of these large issuers had less total debt outstanding in Q2 of this year than they had in 2010.

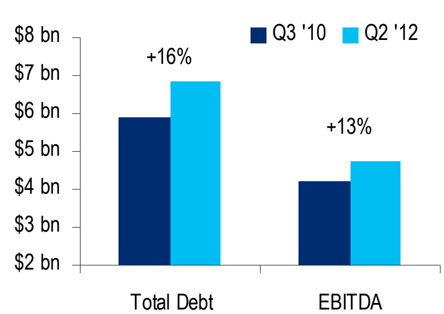
But does the average reflect what the *typical* corporate manager is doing? Perhaps not. For example, we calculate that 72% of companies in our sample have increased total debt over the past two years, while only 28% have reduced it. And Figure 9 shows the same thing — re-leveraging — but from a slightly different vantage point.

Specifically, the chart shows the distribution of debt changes for our sample of 275 issuers (x-axis is the change in debt since Q3 '10, y-axis percent of companies). We see that the tail is skewed sharply to the positive end, which means that if we look at leverage trends in the **context of median rather than average, we see that debt has been increasing dramatically (32% since Q3 '10) and leverage is now at about 1.9x (Figure 2, cover page).**

A number of issuers that are boosting debt levels fall into two categories. The first includes names such as GOOG and EBAY, companies that had little or no debt several years ago but are now taking advantage of low rates. The other group is comprised of companies that had trimmed debt outstanding in the wake of the Lehman experience, but are once again tapping the debt markets more aggressively (e.g., FLIR and CELG). So while the average is more or less steady, leverage for some is increasing. This may not be a bad thing per se as some issuers may have had overly conservative balance sheets…

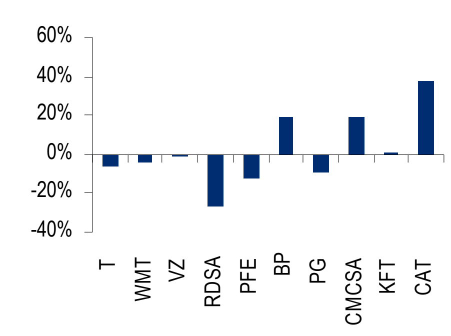
Key point: …but the most important takeaway, in our view, is that leverage for some companies may be increasing more dramatically than many realize.

Figure 7. Debt and EBITDA since Q3 '10



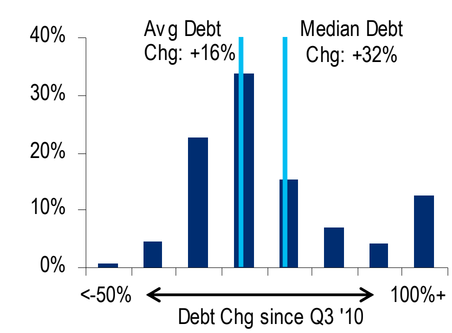
Source: Citi Research, Bloomberg
Note: As of Q2 2012

Figure 8. Change in debt outstandings since Q3 '10 for largest issuers



Source: Citi Research, Bloomberg
Note: As of Q2 2012

Figure 9. Distribution of debt change since Q3 '10



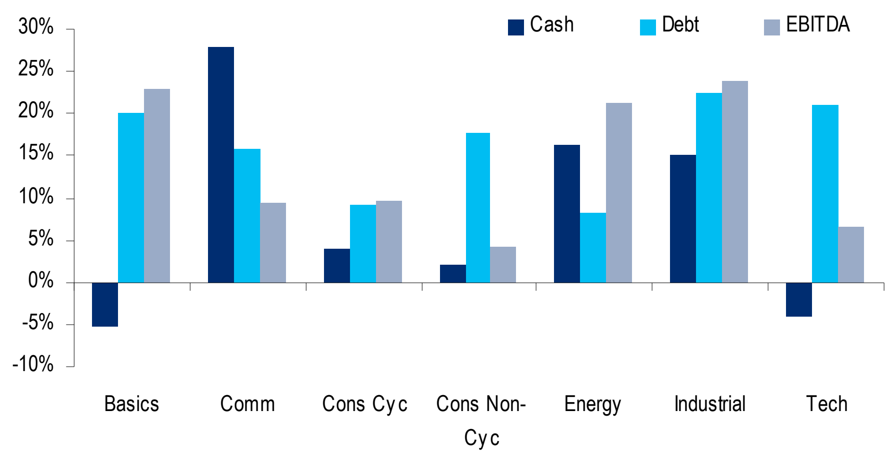
Source: Citi Research, Bloomberg
Note: As of Q2 2012

3. Significant variation in leverage across sectors

Of course, leverage stats for the average (or median) credit do not tell the whole story, as trends can and do vary dramatically across sectors. Figure 10 shows that the absolute level of debt has increased across the board, but in most cases debt growth has more or less kept pace with profit improvement or higher cash reserves, leading to only modestly higher net leverage. However, the outliers to this trend are energy, where net leverage is actually lower, and consumer non-cyclicals and tech, which have moved higher.

In the tech space, for example, we see an over 20% increase in total debt while EBITDA is up only 7%. We suspect much of the increase has been used to fund shareholder-friendly activity, rather than investing in the business which would likely have been reflected in a higher growth rate for EBITDA. Take Hewlett-Packard, for example. The PC maker issued debt to repurchase $17 bn of shares in 2010 and 2011, all while EBITDA fell 23% and its cash balance declined 12%.

Figure 10. Change in leverage components since Q2 '10 by sector



Source: Citi Research, Bloomberg
Note: As of Q2 2012

Note: While we view the LBO screen as a good tool to narrow down the IG universe for potential candidates, investors should also fully evaluate whether or not a deal, LBO or even M&A, could get done.

Please contact us directly for the LBO screen.

4. Screening for LBO candidates

We really couldn't write a piece about leverage without mentioning LBOs, could we? Admittedly, the ramp up in valuations on the back of a strong equity market makes things more expensive. But the amount of money that needs to be put to work and the re-opening of the CLO market mean that larger LBOs are certainly plausible.

In this regard, we put together a screen consisting of the constituents of our BIG Corp index to determine which companies "screen well" for a potential LBO. Our screen is based on the following criteria:

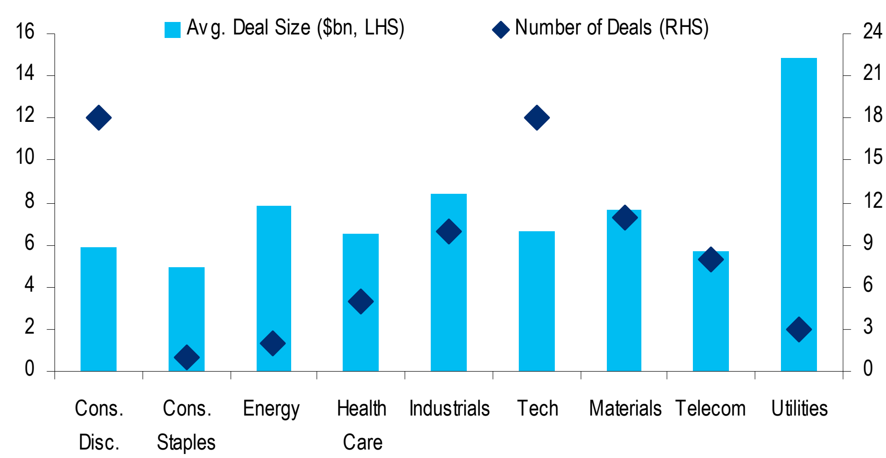
- **A market cap under $15 bn:** We apply a 25% deal premium to the equity price, bringing our maximum equity takeout to $18.75 bn
- **30% equity contribution:** We assume the remainder of the equity takeout would be funded with new debt
- **A blended interest rate of 7.5%:** This assumes an equal split between loans and bonds, with loans priced at L+450 with a 150 Libor floor and bonds at 9%
- **Post LBO**, the company must still generate positive free cash flow
- **Leverage through the structure** must be under 7.5x

In Figure 11, we present our screening results by sector. We find that the consumer, industrial, materials and tech sectors have the most credits that "screen well" for potential LBOs. Interestingly, the average deal size in these sectors is under $8 bn, which to us seems pretty manageable.

We believe balance sheets after an LBO (in all sectors) would be prudent; the average leverage for the credits deemed LBO-able from our screen rises from 2.1x to 5.7x after a transaction. And the average credit from our "screens well" list would still generate more than $400 mm of free cash flow, a feat many high yield credits can't claim. On a sector basis, the industrial credits tend to have the highest average leverage at 6.4x, while consumer staples and utilities have the lowest.

Key point: We encourage readers to contact us directly to discuss names that screen well in more detail, or for the LBO screen itself.

Figure 11. What names screen well? Lots of consumer, industrials, tech, materials



Source: Citi Research, Bloomberg; Note: As of October 25, 2012

5. Trade ideas

1. Wait, fundamentals matter?

Some issuers have boosted outstanding debt meaningfully over the past two years, and despite the bull market spreads have widened as a result. For example, in Figure 12 we present six credits where fundamentals have mattered. On average, over the past two years leverage for these names is more than 1x higher and spreads are approximately 80 bp wider, vastly underperforming the broad cash market that has tightened about 35 bp.

Figure 12. Fundamentals matter…higher leverage, wider cash spreads

	Change since Q3 '10	
Issuer	Spread	Gross Lev
Amgen Inc	+8 bp	+2.2x
Hewlett-Packard	+152 bp	+0.9x
Safeway	+93 bp	+0.8x
Buckeye Partners	+50 bp	+0.6x
Avon Products	+136 bp	+1.3x
Martin Marietta Materials	+50 bp	+1.0x
Average	**+81 bp**	**+1.1x**

Source: Citi Research
Note: Lev changes as of 3Q '12; spread change as of November 5, 2012

So maybe fundamentals do matter. In terms of a trade that is currently available, in Figure 13 we highlight a long / short basket centered on leveraging trends. Specifically we present five credits that have worked to protect their balance sheets over the past few years, and we view these issuers as core holdings with limited leveraging risk looking forward. We suggest selling credits that may have a tendency to lever up, especially those that are trading near their tights.

Figure 13. ADD and REDUCE candidates, based on change in debt (and we acknowledge the "divide by a small number" impact on leverage change)

ADD Candidates			REDUCE Candidates		
Issuer	2Y Debt Chg	Spread	Issuer	2Y Debt Chg	Spread
Procter & Gamble	-10%	46 bp	Texas Instruments	2000%+	34 bp
AT&T Inc	-6%	119 bp	Ensco	1746%	136 bp
Wal-Mart Stores	-4%	70 bp	Occidental Petroleum	203%	46 bp
ConocoPhillips	-3%	91 bp	VF Corp	154%	142 bp
Verizon	-1%	110 bp	Becton Dickinson	146%	64 bp
Average	**-5%**	**87 bp**	**Average**	**+850%+**	**84 bp**

Source: Citi Research
Note: As of November 5, 2012

2. Boost compensation per unit of leverage

One of the most interesting takeaways from our sector level analysis was the overlay of valuations on leverage over time. This gives us a sense of how much compensation per turn of gross leverage is currently available for each sector, and how this has changed relative to other sectors. Consider the tech and the energy sectors, for example. We acknowledge the apples-to-oranges comparison, but we argue that both sectors have recently been out of favor and are hampered by the weakened outlook for global demand.

On a relative basis, compensation per unit of leverage has changed for the two sectors dramatically (Figure 14, next page). For example, two years ago investors were paid nearly 200 bp per turn in each sector, while today that has compressed by 75 bp in tech but only 42 bp in energy. We believe that investors are now being compensated for the weakening fundamentals in energy, whereas tech investors probably haven't fully assessed the pressure on the companies. By moving from tech into energy spread per turn of leverage can increase 32 bp on average.

Figure 14. Compensation per turn of leverage, current vs. '10

	Spread (bp)		Average Leverage		Spread / Lev (bp)	
Sector	**2010**	**Current**	**2010**	**Current**	**2010**	**Current**
Basic Materials	173	142	1.91x	1.85x	90	77
Communications	181	161	1.59x	1.68x	114	96
Consumer, Cyclical	159	124	1.54x	1.53x	103	81
Consumer, Non-Cyc	124	99	1.50x	1.69x	83	59
Energy	**205**	**144**	**1.04x**	**0.93x**	**198**	**156**
Industrial	157	117	1.89x	1.87x	83	63
Technology	**178**	**126**	**0.90x**	**1.02x**	**199**	**124**

Source: Citi Research, Bloomberg
Note: Change is from Q3 2010 – Q2 2012. Our sample set consists of credits with financial data available for the entire period under review. Leverage = average total debt / average EBITDA

3. Meaningful widening for potential LBO candidates

In Figure 15, we list some of LBOs completed during the heyday, and their spreads two weeks before and after news of a deal emerged onto the market. On average, these names traded at 88 bp prior to the event, and during the following two weeks **spreads had tripled to 267 bp – right in line with the overall high yield market at the time.**

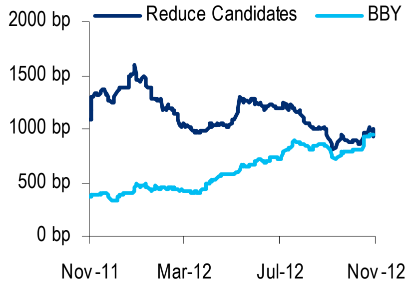
Using this metric — the spread of the high-yield market as a reference point — where could today's LBO candidates trade should a deal occur? For some, the move has already occurred; take Best Buy, arguably the most often mentioned LBO candidate in recent months due to the founder's well publicized efforts to take it private. With BBY 5y CDS trading at 975 bp, valuations are already 460 bp more than the current spread in the high-yield market and in-line with triple-C rated credits.

Figure 15. 5Y CDS spread levels before and after past LBO events

			5Y CDS	
LBO Names	**Approx Event Date**	**2-wk Before**	**2-wk After**	**Change**
Clear Channel	Oct 26, 2006	102 bp	271 bp	+169 bp
First Data	Apr 02, 2007	62 bp	242 bp	+181 bp
Freescale	Sep 11, 2006	76 bp	333 bp	+257 bp
Harrah's	Oct 02, 2006	79 bp	234 bp	+155 bp
HCA	Jul 25, 2006	151 bp	443 bp	+292 bp
Hilton	Jul 03, 2007	106 bp	211 bp	+105 bp
Kinder Morgan	May 30, 2006	33 bp	175 bp	+141 bp
Sabre	Dec 11, 2006	94 bp	314 bp	+220 bp
TXU	Feb 26, 2007	85 bp	182 bp	+97 bp
Average		**88 bp**	**267 bp**	**+180 bp**

Source: Citi Research

Figure 16. BBY vs. other LBO candidates in the news (carry-neutral)… BBY priced in, others not



Source: Citi Research
Note: As of November 6, 2012

For some of the other HG credits that screen well, the story is a bit different. Based on a sample of credits that screen well, we see that the average spread is only 125 bp. This may leave plenty of opportunity to purchase cheap hedges, especially as many of these names are trading near recent tights. We suggest buying a basket of protection on credits that are not yet trading on any LBO-related chatter but screen well (see Figure 17). We would then fund this short by selling protection on BBY (in the ratio of 7.5:1 to make it spread neutral), given our belief that current spreads adequately reflect anticipated news. Note that other candidates are trading only about 20 bp wide to 12-month tights while BBY is over 600 bp wider. Please call to discuss the specific names in detail.

Figure 17. LBO candidates vs. BBY

ADD Candidates (5Y CDS)				REDUCE Candidates (5Y CDS)			
Issuer	Current Spread	12M Tights	12M Wides	Issuer	Current Spread	12M Tights	12M Wides
BBY	951 bp	334 bp	951 bp	CSC	192 bp	175 bp	569 bp
				BSX	112 bp	90 bp	125 bp
				CA	123 bp	105 bp	208 bp
				TYC	82 bp	73 bp	124 bp
				WU	115 bp	75 bp	118 bp
				Average	**125 bp**	**104 bp**	**229 bp**

Source: Citi Research
Note: As of November 6, 2012

Appendix A-1

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