

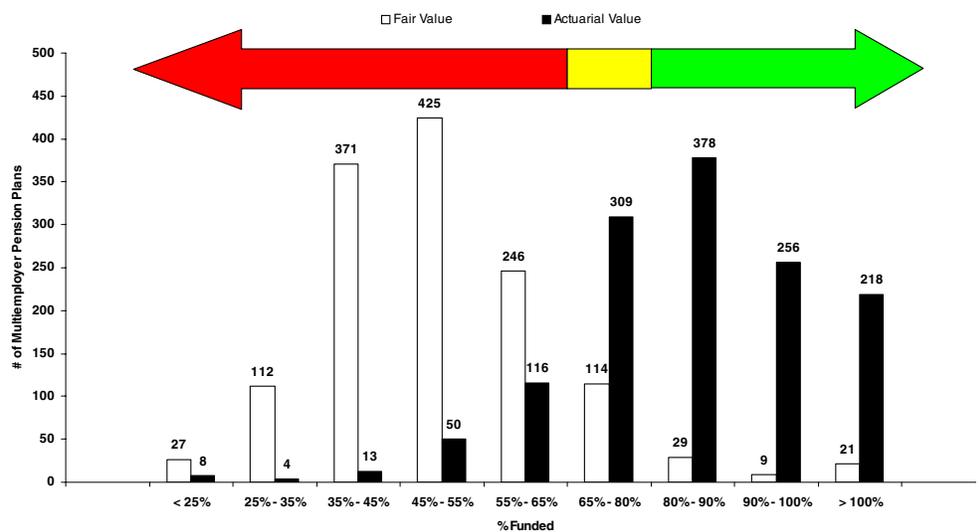
# Crawling Out of the Shadows

ACCOUNTING

## Shining a Light on Multiemployer Pension Plans

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**Exhibit 1: Multiemployer Pension Plans—Distribution of % Funded, Actuarial vs. Fair Value, As of the Most Recent 5500 Filing**



Source: Form 5500 Filings, Credit Suisse Accounting & Tax Research

- **New disclosures (though far from perfect) allow us to start pulling multiemployer pensions out of the shadows.** With nothing on the balance sheet and only contributions to the plans hitting earnings and cash flows, multiemployer exposure has been a mystery. We pulled together data from 1,354 plans, estimated the funded status of each and, using the new disclosures, attempted to allocate the underfunding to S&P 500 companies.
- **We estimate multiemployer pension plans in the U.S. are \$369 billion underfunded (52% funded)** and it looks like most of that underfunding belongs to companies outside the S&P 500. With a heavy concentration among Construction, Transports, Supermarkets and Mining.
- **With multiemployer plans in bad shape, companies could get hit from a number of angles** including, increased contributions, difficult labor negotiations, higher withdrawal liabilities and M&A could be impacted as acquirers have to price in the underfunding. The new insights may even change investor and rating agency opinions of certain companies.

**DISCLOSURE APPENDIX CONTAINS IMPORTANT DISCLOSURES, ANALYST CERTIFICATIONS, INFORMATION ON TRADE ALERTS, ANALYST MODEL PORTFOLIOS AND THE STATUS OF NON-U.S. ANALYSTS. FOR OTHER IMPORTANT DISCLOSURES, visit [www.credit-suisse.com/researchdisclosures](http://www.credit-suisse.com/researchdisclosures) or call +1 (877) 291-2683.** U.S. Disclosure: Credit Suisse does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

## Crawling Out of the Shadows

Over the years Corporate America's exposure to multiemployer pension plans has been a bit of a mystery. The problem for investors and analysts was a lack of information. The disclosures were typically limited to the amount that the company contributed to multiemployer pension plans and not much else. In most cases nothing was recognized on the balance sheet. As a result there's an off-balance-sheet liability of unknown size lurking in the shadows for companies that participate in multiemployer pension plans. (For some background information on multiemployer pension plans, see page 11.)

In a push to try and improve transparency (especially as the plans' health continued to deteriorate) the FASB is requiring companies to provide more information about their involvement with multiemployer pension plans. The new disclosures (which started showing up for the first time this 10-K season), though far from perfect, can be used to start pulling multiemployer pension plans out of the shadows.

Since companies are not required to provide information about the health of the multiemployer plans that they participate in (other than by color, red is bad, green is good) or their share of a plans underfunding we took a shot at it ourselves. For this report we pulled together data from more than 1,350 multiemployer pension plans (stored it in our multiemployer plan database) and estimated the funded status of each plan through March 16, 2012. In the aggregate we estimate that U.S. multiemployer pension plans are now \$369 billion underfunded (using a corporate bond based discount rate) or 52% funded (even after the recent run up in the stock market and rise in yields). Using the plan ID numbers from the new disclosure we were able to allocate \$43 billion of the underfunding to the 44 calendar year S&P 500 companies that participate in multiemployer pension plans and are among the first companies to provide the new disclosures.

Apparently defined benefit pension plans are not just a large cap issue as it looks like most of the multiemployer pension exposure belongs to companies outside the S&P 500. The plans are heavily concentrated among certain industries including, Construction, Transports, Supermarkets and Mining. Check out companion research reports from Credit Suisse's U.S. Automotive and Transport analyst Chris Ceraso, *Central States Was One of Many, UPS Still has Big Multi-Employer Risk*, and Food & Drug Retailing and Household & Personal Care analyst Ed Kelly, *Large Pension Liability Uncovered, Downgrade to Neutral as Structural Issues Grow*.

With the plans in bad shape, the companies that have multiemployer exposure could get hit from a number of angles, including increased contributions to the plans resulting in a drain on cash flows and a hit to earnings. Some companies may be facing more difficult labor negotiations as they try and negotiate cuts to wages and/or benefits to help pay for higher pension contributions. Withdrawal liabilities could increase too, driving up the price of pulling out of a multiemployer pension plan. It may even impact M&A as an acquirer is going to pay less (all else equal) for a company with heavy exposure to underfunded multiemployer plans. In addition, as the multiemployer exposure becomes clearer, investors may decide that certain companies are more expensive than they initially appear after factoring in this off-balance-sheet liability. Even credit ratings could be impacted if the ratings agencies are able to gain new insight about a company's share of multiemployer underfunding and its impact on future cash flows.

## Shining a Light on Multiemployer Pension Plans

Our first step in pulling multiemployer pension plans out of the shadows was to get our hands on 5500 filings. A 5500 filing is the pension plan's annual report filed with the IRS and the Department of Labor (DOL). These filings contain a wealth of information about defined benefit pension plans, including plan assets, pension obligation, contributions to the plan, etc. The only problem is that the data is stale, in many cases the 2010 filing is the most recent available and most of the data is from the beginning of 2010. The reason for

the delay is that the filings are due seven months after the end of the plan year, with the possibility of a 2 ½ month extension and then another 90 days for the DOL to post the filing on its web site, you're looking at a one year lag between the plan's year-end and the filing becoming available. The 5500 filings can be found on the DOL's website at <http://www.efast.dol.gov/portal/app/disseminate?execution=e1s1>.

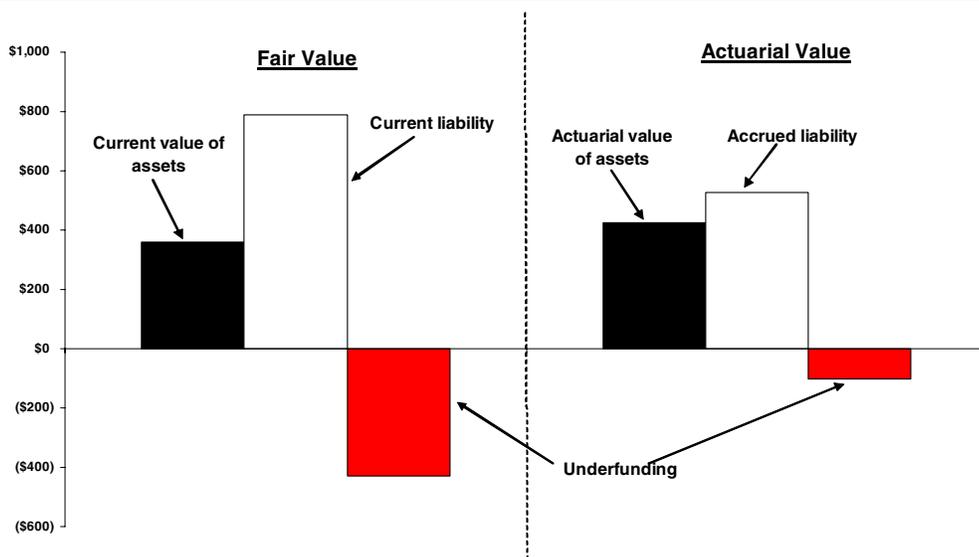
**Two Very Different Views of the Plan's Health**

Combing through the DOL's website we were able to find 5500 filings for 1,354 multiemployer pension plans (not too far off from the 1,459 plans the PBGC claims to insure). Pulling together the data from each plan we found that as of the most recent filing in the aggregate the multiemployer pension plans in the U.S. had \$360 billion in plan assets supporting \$788 billion in pension obligations, resulting in \$428 billion of underfunding or (46% funded). That's not a pretty picture, in fact it makes single employer pension plans look downright healthy.

Keep in mind that these amounts are based on the fair value of plan assets (i.e., market prices) and a current liability that uses a four year average yield on 30-year Treasuries as the discount rate. We think that provides a pretty accurate picture of the financial condition of the plans at that point in time, though we'd prefer that market rates were used as a discount rate instead of a four-year average (we'll come back to that).

The 5500 filings present two views of the pension plans, the current position (discussed above) and another more actuarial / smoothed view of the pension plan (which as we discuss below drives pension funding requirements). The biggest difference between the two views is the discount rate used to calculate plan liabilities (the expected return on plan assets is used for the actuarial calculation, while 30-year treasury yields are used for the current calculation). On an actuarial basis the plans don't look nearly as troubled as you can see in Exhibit 2, the actuarial value of assets was \$426 billion in the aggregate (19% above fair value) and the accrued pension liability was only \$527 billion, resulting in \$101 billion of underfunding, magically the same pension plans improved to 81% funded. Guess that's what happens when you smooth your assets over five years and use an expected rate of return (median of 7.5%) as your discount rate, presto change-o it's a healthier pension plan.

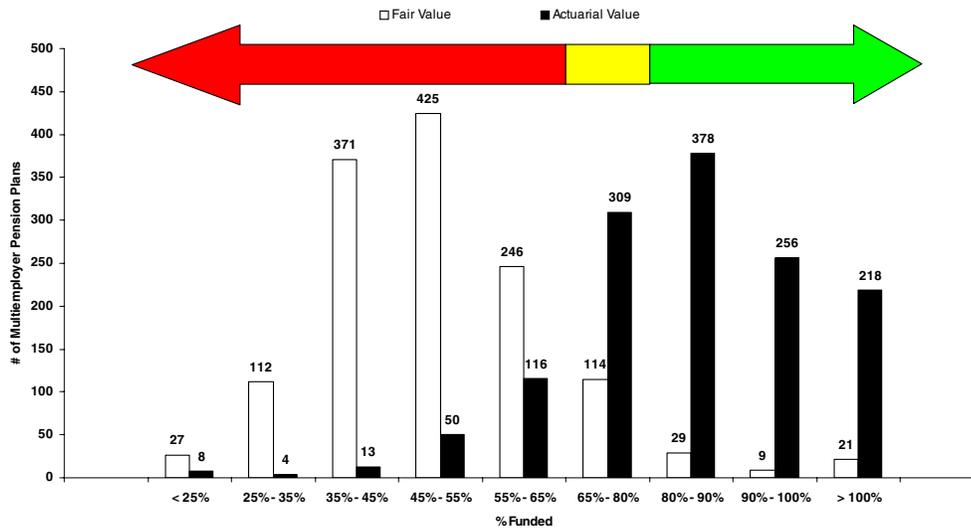
**Exhibit 2: Multiemployer Pension Plans—\$428 Billion Underfunded or \$101 Billion Underfunded, You Choose, As of the Most Recent 5500 Filing**  
*US\$ in billions*



Source: Form 5500 Filings, Credit Suisse Accounting & Tax Research

At the plan level the disparity between the actuarial and more realistic view of the pension is striking as you can see in Exhibit 3 which shows a distribution of plan funded status both ways for over 1350 plans. Notice how the distribution skews toward the right (healthier) when the actuarial view of the pension plan is used and skews toward the left (weaker) when the fair value of plan assets and current liability are used.

**Exhibit 3: Multiemployer Pension Plans—Distribution of % Funded, Actuarial vs. Fair Value, As of the Most Recent 5500 Filing**



*Note: Fair value % funded = current value of assets / current liability*  
*Note: Actuarial value % funded = actuarial value of assets / accrued liability*  
*Note: 1,352 pension plans on an actuarial basis as two plans did not provide actuarial values.*  
*Source: Form 5500 Filings, Credit Suisse Accounting & Tax Research*

On an actuarial basis the median multiemployer pension plan was 85% funded, switch over to a more realistic view and the median plan drops to 48% funded. We found 500 multiemployer plans (37% of the total) that were less than 80% funded (i.e., financially troubled) on an actuarial basis. That number balloons to 1,295 plans (96% of the total) when you use the fair value of plan assets and current liability. In fact, there are 795 plans that go from being considered “healthy” or in the green zone (better than 80% funded) on an actuarial basis to financially troubled in reality including 689 plans that would drop below 65% funded, the level at which a plan is considered to be in critical condition (code red).

If we zero in on the largest multiemployer plans we find the same fact pattern, what appear to be relatively healthy plans on an actuarial basis look much different when you use the fair value of plan assets and current liability to measure the underfunding. In Exhibit 4 we compare the smoothed view of the pension plan to an unsmoothed view for the ten largest multiemployer plans by pension obligation (which account for 27% of the aggregate multiemployer current liability and plan assets). Note: the top 50 plans account for around half of aggregate assets and liabilities. Notice how all six plans that were in the green (over 80% funded) on an actuarial basis plummet into the red zone (less than 65% funded) when a more realistic measure of the plan is taken. Take the Western Conference of Teamsters Pension Plan as an example, on an actuarial basis the plan had \$30.7 billion of plan assets supporting a \$34.4 billion accrued pension liability, resulting in a plan that appeared relatively healthy at 89.3% funded. Substitute the fair value of plan assets and current liability and the plan is transformed to one that was only 55.7% funded.

**Exhibit 4: Top 10 Largest Multiemployer Pension Funds**  
 US\$ in millions

Pension Fund	Valuation date	Actuarial Value				Fair Value			
		Actuarial Value of Assets	Accrued Liability <sup>1</sup>	(Under) / Over Funded	% Funded	Current Value of Assets	Current Liability	(Under) / Over Funded	% Funded
Central States, Southeast And Southwest Areas Pension Plan	1/1/2010	\$ 22,766	\$ 35,903	\$ (13,137)	63.4%	\$ 19,542	\$ 49,859	\$ (30,317)	39.2%
Western Conference Of Teamsters Pension Plan	1/1/2010	30,735	34,415	(3,680)	89.3%	26,668	47,901	(21,233)	55.7%
Central Pension Fund Of The IUOE & Participating Employers	2/1/2010	11,120	12,992	(1,872)	85.6%	9,444	21,130	(11,686)	44.7%
National Electrical Benefit Fund	1/1/2010	11,647	13,535	(1,888)	86.1%	9,706	20,772	(11,066)	46.7%
Boilermaker-Blacksmith National Pension Trust	1/1/2010	7,565	9,512	(1,947)	79.5%	6,272	14,420	(8,148)	43.5%
1199SEIU Health Care Employees Pension Fund	1/1/2010	8,674	8,638	35	100.4%	6,672	13,448	(6,776)	49.6%
I.A.M. National Pension Plan	1/1/2010	9,348	8,653	696	108.0%	7,418	12,891	(5,473)	57.5%
New England Teamsters & Trucking Industry Pension	10/1/2009	3,186	6,159	(2,974)	51.7%	2,655	10,467	(7,813)	25.4%
Plumbers And Pipefitters National Pension Fund	7/1/2009	4,579	6,712	(2,133)	68.2%	3,816	10,242	(6,426)	37.3%
Bakery & Confectionery Union & Industry International Pension Fund	1/1/2010	5,912	6,834	(922)	86.5%	4,613	9,942	(5,329)	46.4%

<sup>1</sup>Accrued liability under unit credit cost method

Source: Form 5500 Filings, Credit Suisse Accounting & Tax Research

**Multiemployer Pension Plans, \$369 Billion Underfunded**

The data from the 5500 filings is interesting but as we noted above, it's a bit stale. In order to make it more relevant to investors and analysts we took a shot at projecting it forward to the present. We did not even attempt to project the actuarial values, instead we focused on the fair value of plan assets and current liability for each multiemployer pension plan. We think the current value view of a plan is a better representation of the current financial condition of a pension plan, even though the actuarial values are important in determining the funding requirements.

On the asset side we start with plan assets as of the most recent reported 5500 filing year-end (e.g., 2010) which are then increased by estimated contributions and reduced by estimated benefit payments for 2011 and through March 16, 2012 (assuming both remain at the same level as last reported). Plan asset returns are estimated by applying market returns to each plan's unique asset allocation (split among, equities, fixed income, real estate and other assets). As for the pension obligation we start with the current liability as of the beginning of the year from the most recent 5500 filing (e.g., 2010) which is then increased by estimated normal cost (i.e., service cost) for 2010, 2011 and through March 16, 2012 (assuming it remains at the same level as last reported) and interest cost (based on the current liability discount rate). The obligation is also reduced by estimated benefit payments and adjusted for an estimate of actuarial gains or losses due to changes in the discount rate (assuming a 12-year duration). We run through the methodology in Exhibit 5 using the Western Conference of Teamsters Pension Plan as an example.

**Exhibit 5: Estimating Pension Plan Assets and Current Liability as of March 16, 2012, an**
**Example**
*US\$ in millions*
**Western Conference of Teamsters Pension Plan (EIN# 91-6145047, Plan# 001)**

Date	Current Value of Plan Assets		Current Liability	
1/1/2010	Reported Plan Assets	\$ 26,655	Reported Current Liability	\$ 47,901
			Normal cost <sup>3</sup>	995
			Interest cost	2,165
			Employee contribution <sup>3</sup>	-
			Benefits paid <sup>3</sup>	(2,253)
			Actuarial loss / (gain) <sup>5</sup>	632
12/31/2010	Reported Plan Assets	\$ 29,175	Estimated Current Liability	\$ 49,440
	Actual return <sup>2</sup>	935	Normal cost <sup>3</sup>	995
	Employer contribution <sup>3</sup>	1,276	Interest cost <sup>4</sup>	2,182
	Employee contribution <sup>3</sup>	-	Employee contribution <sup>3</sup>	-
	Benefits paid <sup>3</sup>	(2,253)	Benefits paid <sup>3</sup>	(2,253)
			Actuarial loss / (gain) <sup>5</sup>	1,068
12/31/2011	Estimated Plan Assets	\$ 29,133	Estimated Current Liability	\$ 51,432
	Actual return <sup>2</sup>	1,561	Normal cost <sup>1,3</sup>	207
	Employer contribution <sup>1,3</sup>	266	Interest cost <sup>1,4</sup>	454
	Employee contribution <sup>1,3</sup>	-	Employee contribution <sup>1,3</sup>	-
	Benefits paid <sup>1,3</sup>	(469)	Benefits paid <sup>1,3</sup>	(469)
			Actuarial loss / (gain) <sup>5</sup>	555
3/16/2012	Estimated Plan Assets	\$ 30,490	Estimated Current Liability	\$ 52,179

<sup>1</sup>Pro-rated from 12/31/2011 to 3/16/2012

<sup>2</sup>Asset allocation was 40% equities, 44% fixed income, 6% real estate and 10% other assets. We assumed the following returns in 2011 and YTD through March 16, 2012 respectively: equities -2.5%, 12.5%, fixed income 7.5%, 0.5%, real estate 11%, 3%, other assets 3%, 0.5%.

<sup>3</sup>We simply carried forward the normal cost (i.e., expected increase in current liability), benefits paid and contributions from the 2010 5500 filing.

<sup>4</sup>Interest cost is estimated by applying the current liability discount rate (4.58%, 4.47% and 4.29% in 2010, 2011 and 2012 respectively to the beginning of period current liability adjusted for ½ benefits paid and ½ service cost.

<sup>5</sup>Actuarial loss is the result of 11 bps, 18 bps and 9 bps drops in the discount rate during 2010, 2011 and 2012 respectively assuming the current liability has a 12 year duration (actuarial rule of thumb).

Note: Fair value of plan assets are from schedule H of the 5500 filing.

Source: Form 5500 Filings, Credit Suisse estimates

We estimate that in the aggregate U.S. multiemployer pension plans are now \$454 billion underfunded (47% funded), with \$407 billion in plan assets and an \$861 billion pension obligation. That's an \$8 billion decline since the year-end and a \$25 billion drop from the last reported data in the 5500 filings (the start of 2010 in most cases).

Keep in mind that our estimates involve a bunch of simplifying assumptions. As a result actual multiemployer underfunding could vary from our estimate for various reasons, including that we may have under/over estimated the return on plan assets (maybe asset allocations have changed or the plan under/out performed the market); actual contributions may have differed from our estimate; or we could have under/over estimated actuarial losses (e.g., if plans have a different duration than our 12-year rule of thumb).

Before we allocate the estimated multiemployer underfunding to individual companies we had one more adjustment to make: we decided to change the discount rate so that it's closer to the discount rate that companies use for their own pension plans. We replaced the four-year average yield on 30-year treasuries that's used to discount the current liability with the median discount rate (4.70%) that the calendar year companies in the S&P 500 used when accounting for their own pension plans 2011. Remember that rate is supposed to be based on high grade corporate bond yields with a similar maturity profile to

their pension obligation. If we are using the fair value of plan assets we need to compare it to a pension obligation discounted using market rates so that we are comparing apples-to-apples. Using the accounting pension discount rate is not a bad short-cut as it's based on spot rates at the company's fiscal year-end (we increased the rate by 30 bps to 5% to reflect the move in corporate bond yields since the end of the year). Our adjustment to corporate bond yields caused the obligation to shrink by \$85 billion or 10% to \$776 billion, which drove the aggregate multiemployer plan underfunding to \$369 billion (52% funded).

### Allocating the Underfunding to Individual Companies

Armed with an estimate of the funded status for each multiemployer pension plan its time to put the new disclosures required by the FASB to work in order to allocate the underfunding to individual companies. The new disclosures (see Exhibit 6 for an example) include the name and tax ID number of "individually significant" multiemployer pension plans, contributions to the plans, which zone the plan is in (e.g., is it in the red zone) and whether a funding improvement or rehab plan (see discussion below) has been put in place.

#### Exhibit 6: UPS Multiemployer Pension Plan Disclosure

Pension Fund	EIN / Pension Plan Number	Pension Protection Act Zone Status		FIP/RP Status Pending/ Implemented	(in millions) UPS Contributions			Surcharge Imposed
		2011	2010		2011	2010	2009	
Alaska Teamster-Employer Pension Plan	92-6003463-024	Red	Red	Yes/Implemented	\$ 4	\$ 3	\$ 3	No
Automotive Industries Pension Plan	94-1133245-001	Red	Red	Yes/Implemented	4	4	4	No
Central Pennsylvania Teamsters Defined Benefit Plan	23-6262789-001	Green	Yellow	No	27	26	25	No
Employer-Teamsters Local Nos. 175 & 505 Pension Trust Fund	55-6021850-001	Green	Green	No	8	8	8	No
Hagerstown Motor Carriers and Teamsters Pension Fund	52-6045424-001	Red	Red	Yes/Implemented	5	4	4	No
I.A.M. National Pension Fund / National Pension Plan	51-6031295-002	Green	Green	No	25	24	22	No
International Brotherhood of Teamsters Union Local No. 710 Pension Fund	36-2377656-001	Yellow	Yellow	Yes/Implemented	74	70	66	No
Local 705, International Brotherhood of Teamsters Pension Plan	36-6492502-001	Yellow	Yellow	Yes/Implemented	58	56	52	No
Local 804 I.B.T. & Local 447 I.A.M.—UPS Multiemployer Retirement Plan	51-6117726-001	Red	Red	Yes/Implemented	84	84	83	No
Milwaukee Drivers Pension Trust Fund	39-6045229-001	Green	Yellow	No	26	24	22	No
New England Teamsters & Trucking Industry Pension Fund	04-6372430-001	Red	Red	Yes/Implemented	124	112	104	No
New York State Teamsters Conference Pension and Retirement Fund	16-6063585-074	Red	Red	Yes/Implemented	57	52	50	No
Teamster Pension Fund of Philadelphia and Vicinity	23-1511735-001	Yellow	Orange	Yes/Implemented	41	39	37	No
Teamsters Joint Council No. 83 of Virginia Pension Fund	54-6097996-001	Yellow	Red	Yes/Implemented	41	38	35	No
Teamsters Local 639—Employers Pension Trust	53-0237142-001	Green	Yellow	Yes/Implemented	33	31	30	No
Teamsters Negotiated Pension Plan	43-6196083-001	Red	Red	Yes/Implemented	22	20	19	No
Truck Drivers and Helpers Local Union No. 355 Retirement Pension Plan	52-6043608-001	Yellow	Red	Yes/Implemented	12	12	12	No
United Parcel Service, Inc.—Local 177, I.B.T. Multiemployer Retirement Plan	13-1426500-419	Red	Red	Yes/Implemented	57	59	61	No
Western Conference of Teamsters Pension Plan	91-6145047-001	Green	Green	No	476	449	427	No
Western Pennsylvania Teamsters and Employers Pension Fund	25-6029946-001	Red	Red	Yes/Implemented	21	20	19	No
All Other Multiemployer Pension Plans					44	51	42	
				Total Contributions	\$ 1,243	\$ 1,186	\$ 1,125	

Source: UPS December 31, 2011 10-K, Credit Suisse Accounting & Tax Research

Focusing on the 367 calendar year companies in the S&P 500 (as they are the first to provide the new multiemployer disclosures) we found 27 companies that provided detailed plan-by-plan information. We were able to link the tax ID numbers disclosed by the companies to our multiemployer plan database. But what portion of a multiemployer plan's underfunding do we allocate to an individual company? We used the amount that the company contributed to the plan as a percentage of total contributions per the most recent 5500 filing, for example, if a company contributed \$100 million to a multiemployer plan but total contributions to the plan from all employers were \$1 billion, we assumed 10% of the plan's underfunding belonged to the company. Keep in mind that the company's share of underfunding could vary from year-to-year and differ from our estimate. In Exhibit 7 we use UPS as an example of how we estimate the multiemployer underfunding by company. Note that we did not include multiemployer OPEB plans or foreign multiemployer pension plans in our analysis (more off-balance-sheet liabilities).

**Exhibit 7: An Example—Estimating Multiemployer Pension Underfunding for UPS**

US\$ in millions

Pension Fund	UPS Contribution				Total Contribution All Employers	A	B	A x B
	2011	2010	2009	Plan Year		Company Contribution as a % of Total Contribution	Estimated Plan Underfunding	UPS Share of Estimated Underfunding
Alaska Teamster-Employer Pension Plan	\$ 4	\$ 3	\$ 3	7/1/2009	\$ 30	10.1%	\$ (699)	\$ (70)
Automotive Industries Pension Plan	4	4	4	1/1/2010	31	12.9%	(1,345)	(174)
Central Pennsylvania Teamsters Defined Benefit Plan	27	26	25	1/1/2010	52	49.5%	(839)	(416)
Employer-Teamsters Local Nos. 175 & 505	8	8	8	1/1/2010	13	60.9%	(242)	(148)
Hagerstown Motor Carriers and Teamsters	5	4	4	7/1/2010	5	77.3%	(166)	(128)
I.A.M. National Pension Fund / National Pension Plan	25	24	22	1/1/2010	332	7.2%	(5,176)	(374)
I.B.Teamsters Union Local No. 710 Pension Fund	74	70	66	2/1/2010	94	74.2%	(1,516)	(1,125)
Local 705, International Brotherhood of Teamsters	58	56	52	1/1/2010	79	71.1%	(1,349)	(959)
Local 804 I.B.T. & Local 447 I.A.M.—UPS	84	84	83	1/1/2010	82	100.0%	(1,066)	(1,066)
Milwaukee Drivers Pension Trust Fund	26	24	22	1/1/2010	25	94.6%	(377)	(357)
New England Teamsters & Trucking Industry	124	112	104	10/1/2009	231	45.1%	(8,071)	(3,642)
New York State Teamsters Conference	57	52	50	1/1/2010	87	60.1%	(3,640)	(2,187)
Teamster Pension Fund of Philadelphia and Vicinity	41	39	37	1/1/2010	85	45.7%	(2,017)	(922)
Teamsters Joint Council No. 83 of Virginia	41	38	35	1/1/2010	43	88.2%	(528)	(465)
Teamsters Local 639—Employers Pension Trust	33	31	30	1/1/2010	35	88.1%	(792)	(698)
Teamsters Negotiated Pension Plan	22	20	19	6/1/2010	21	94.9%	(294)	(279)
Truck Drivers and Helpers Local Union No. 355	12	12	12	1/1/2010	17	69.5%	(374)	(260)
United Parcel Service, Inc.—Local 177, I.B.T.	57	59	61	1/1/2010	59	100.0%	(898)	(898)
Western Conference of Teamsters Pension Plan	476	449	427	1/1/2010	1,276	35.2%	(16,680)	(5,867)
Western Pennsylvania Teamsters and Employers	21	20	19	1/1/2010	44	45.5%	(1,587)	(722)
All Other Multiemployer Pension Plans	44	51	42					(748) <sup>1</sup>
<b>Total</b>	<b>\$ 1,243</b>	<b>\$ 1,186</b>	<b>\$ 1,125</b>					<b>\$ (21,505)</b>

<sup>1</sup>Applied a 17x multiple to 2011 contribution

Source: Company data, Form 5500 Filings, Credit Suisse estimates

For the 17 calendar year S&P 500 companies with multiemployer exposure that don't provide the new detailed disclosures (maybe because they don't participate in "individually significant" multiemployer pension plans) we applied a multiple of 17 times (based on the median multiple of underfunding to contributions for all plans) to their most recent year multiemployer contributions to estimate their share of the plans' underfunding.

### Who Said Small Caps Don't Have Pension Exposure?

Based on our analysis we have allocated \$43 billion of the \$369 billion in aggregate multiemployer plan underfunding to the 44 calendar year S&P 500 companies with exposure to these types of pension plans. In other words that's a \$43 billion off-balance-sheet liability. The S&P 500 companies' share of the total multiemployer pension underfunding is so far only 12% of the total. We would expect that to grow a bit once we take into account the companies with different fiscal year-ends. That said it looks like most of the \$369 billion in multiemployer underfunding belongs to companies outside the S&P 500, for now. Keep in mind that larger companies could end up taking on more of the multiemployer burden as the "last man standing" in the plans, if smaller companies were to fail.

Apparently defined benefit pension plans are not just a large cap company issue. It's the more transparent single employer plans that haunt the big caps and get the most attention while the shadowy multiemployer plans appear to be causing more trouble for mid/small cap and private companies. If you're interested in multiemployer exposure for a company that's outside the S&P 500 and you happen to know the plans in which the company participates along with the contributions that they make to each plan give us a call, we can

put our trusty multiemployer pension database to work and help you figure out the company's share of multiemployer plan underfunding.

### **Cash Flow Consequences, Sharing the Burden**

OK, so multiemployer pension plans are in bad shape, but how and when do the claims come due? One possibility is that a company participating in an underfunded multiemployer plan would have to make increased contributions to the plan causing a drain on future cash flows.

However, it's tough to tell when and by how much the contributions will go up because contributions to a multiemployer pension plan are negotiated through collective bargaining. We'd suggest keeping an eye on the expiration date of the collective bargaining agreements (its part of the new required disclosures) as that may give you a sense for when company contributions could change. For example, UPS disclosed a July 31, 2013 expiration date for the collective bargaining agreements for all but two of the multiemployer pension plans that it participates in.

Safeway highlighted a number of factors that would influence how much it would have to contribute to multiemployer pension plans including "the outcome of collective bargaining, actions taken by trustees who manage the plans, government regulations, the actual return on assets held in the plans and the potential payment of a withdrawal liability if the company chose to exit a market, among other factors."

Also keep in mind that at the bargaining table if employers are required to contribute more to their pension plans they may negotiate to try and take it from wages and/or other benefits (i.e., pay more for pensions but less for wages). How successful they are will depend in part upon how much leverage they have over labor.

Even if a plan is in bad shape and a funding improvement or rehab plan is put in place, restoring the plan to good health can turn into a joint effort between employers (higher contributions) and labor (a reduction in benefits). The potential sharing of the underfunding is why Moody's would cut its estimate of multiemployer underfunding in half before allocating it to individual companies, Moody's assumed that the underfunding would be split evenly between employers and labor.

In addition to increased contributions, another way in which multiemployer underfunding could impact cash flows is through the withdrawal liability (as discussed below) that's the amount a company would have to pay to pull out of a multiemployer pension plan. However, the payment is not due all at once it could be spread over 20 years.

One last (roundabout) way in which underfunded multiemployer pension plans could impact cash flows is through M&A. For example, if a company were looking to sell a business with multiemployer exposure, the acquirer would want to be compensated for taking on the associated underfunding (i.e., they'd pay less). Makes you wonder: if an acquirer would take multiemployer plans into account when determining a purchase price (treating the underfunding like net debt) then why shouldn't you when trying to figure out what to pay for a stock?

### **Have You Factored Multiemployer Pension Plans into Your Analysis/Valuation?**

To get a sense for how big of a claim the multiemployer pension plans might have on a particular company we compared their share of the estimated underfunding to market cap. We found that of the 44 calendar year S&P 500 companies with multiemployer exposure, their share of the estimated underfunding (after-tax) is more than 5% of market cap for the seven companies in Exhibit 8.

**Exhibit 8: Estimated Share of Multiemployer Pension Plan Underfunding More than 5% of****Market Cap<sup>1</sup>**

US\$ in millions

<b>Company</b>	<b>Ticker</b>	<b>Multiemployer Pension Contribution 2011</b>	<b>Estimated Share of Multiemployer Underfunding</b>	<b>After-Tax Multiemployer Underfunding / Market Cap</b>
Safeway Inc	SWY	\$ 263	\$ (6,954)	(76.1%)
Dean Foods Co	DF	30	(721)	(21.2%)
United Parcel Service Inc B	UPS	1,243	(21,505)	(18.6%)
Quanta Services Inc	PWR	47	(1,042)	(14.8%)
CONSOL Energy Inc	CNX	36	(1,186)	(10.0%)
United States Steel Corp	X	63	(576)	(8.7%)
Alpha Natural Resources	ANR	15	(388)	(6.6%)

<sup>1</sup>Market cap as of March 16, 2012

Note: We did not include multiemployer OPEB and foreign multiemployer pension plans in our analysis.

Source: Company data, Form 5500 filings, Credit Suisse estimates

Keep in mind that the analysis in Exhibit 8 fully loads the estimated multiemployer underfunding on each company. However, as we mentioned above some portion of that underfunding could be shared by labor through a reduction in benefits or wages. How much is shared can vary from plan to plan, and that is why we suggest speaking with the companies you invest in to get their view on how much of the liability belongs to the company and how much belongs to labor.

Now some of you might be thinking that the underfunding is already factored into the stock price through the market's infinite wisdom, the lack of information on multiemployer plans may lead others to believe that its not. One way of gauging how multiemployer plans are captured by the market is to simply apply a P/E multiple to the company's (after-tax) multiemployer contributions as that amount is included in earnings. So if for example a company contributed \$100 million (after-tax) to multiemployer pension plans and the stock is trading at 15 times earnings, the market may have captured a \$1.5 billion exposure to multiemployer plans (without even knowing it).

If we compare the back of the envelope (pension contribution x P/E multiple) multiemployer exposure to our estimate of the company's share of the multiemployer underfunding we find that it's 118% of the underfunding for UPS and 56% of the underfunding for Safeway. As a result you might think that the market is more than capturing multiemployer plans for UPS, but is missing the boat for Safeway. However, this type of analysis is flawed. In order to work a multiemployer plan into a valuation you need to take into account the underfunding, the on-going normal/service cost, and pension plan risks. If the plan is still open and employees continue to earn benefits (normal cost), new liabilities will get layered on in the future (those costs can be a large part of the contributions to the plan, see below for further discussion). Also don't forget about trying to take into account the various risks that the plan is taking on (e.g., asset liability mismatch) which could cause the plan's health to bounce up and down.

That's why we prefer using an adjusted EV/EBITDA multiple which at the very least captures both the underfunding and the normal cost but it does not capture risk (two out of three ain't bad). For this analysis we adjust both the numerator and denominator. Starting with the enterprise value as of March 16, 2012 we add our estimate of the after-tax multiemployer pension plan underfunding (treating it as net debt). We make two adjustments to the 2011 EBITDA, first we add back the contributions that the company made to the plan then we subtract an estimate of the company's share of their plan's normal cost (i.e., service cost).

You might be wondering why we're adding back cash contributions, it's a cash cost after-all. The reason for the add back is that the contribution could be made up of two parts, paying down the underfunding (i.e., debt service) and paying for new benefits (i.e., normal

cost). We only want to include in EBITDA the part of the contribution that's going toward new benefits since it's an operating cost and exclude the debt service.

We compare the reported EV/EBITDA to the EV/EBITDA adjusted for multiemployer pension plans. The adjustment makes all but one company appear more expensive on an EV/EBITDA basis, including the five companies in Exhibit 9 where the multiple increases by more than half a turn.

**Exhibit 9: EV / EBITDA Increases by More than Half a Turn after Adjusting for Multiemployer Pension Plans**

Company	Ticker	EV <sup>1</sup> / EBITDA		Change
		Reported	Adjusted	
Safeway Inc	SWY	4.9x	6.7x	1.8x
Quanta Services Inc	PWR	10.8x	12.3x	1.5x
United Parcel Service Inc B	UPS	10.5x	11.9x	1.4x
United States Steel Corp	X	8.5x	9.1x	0.6x
Dean Foods Co	DF	8.0x	8.6x	0.6x

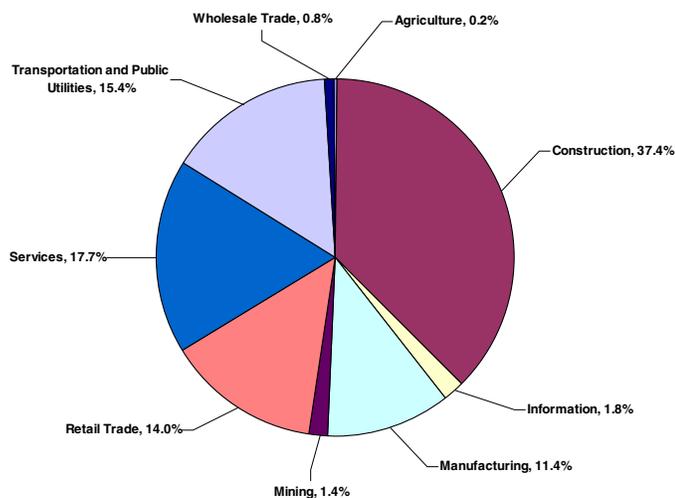
<sup>1</sup>Enterprise Value as of March 16, 2012

Source: Compustat, Form 5500 Filings, Credit Suisse estimates

This type of analysis begs the question: how much of the contribution to these plans is going toward paying down the underfunding (debt service) versus just covering the ongoing normal cost of the plan? In the aggregate as of the most recent 5500 filing we found that the current liability normal cost was \$18 billion in the aggregate that's 93% of the \$20 billion in total contributions made to all multiemployer pension plans (the median is 80%). In other words most of the contributions are going toward covering the normal cost as opposed to paying down the underfunding. It appears that for all but two of the companies in our analysis more than half of the contributions made to the multiemployer plans are going toward normal cost. At this pace it'll take a while before that level of contributions make any sort of dent in the underfunding, a signal that contributions to multiemployer pension plans probably need to move higher.

## Multiemployer Pension Plans, Some Background

As its name indicates, a multiemployer pension plan (aka Taft-Hartley plan) has more than one company contributing to a collectively bargained defined benefit pension plan. According to the Pension Benefit Guaranty Corporation (PBGC) there are 1,459 multiemployer pension plans in the U.S. with more than 10 million (mostly unionized) participants. As you can see in Exhibit 10, multiemployer plans are popular among certain industries, with a heavy concentration among Construction companies.

**Exhibit 10: Multiemployer Pension Plans—Participants by Industry**

Source: *Pension Benefit Guaranty Corporation 2010 Data Book, Credit Suisse Accounting & Tax Research*

Multiemployer pension plans are run by a board of trustees with equal representation from labor and management. Benefits are typically a fixed dollar amount based upon years of service (e.g., \$50 per month x 20 years of service = \$1,000 per month in retirement). Contributions to the plan are set for the term of the collective bargaining agreement (generally two to five years) and are usually based on a negotiated hourly rate (e.g. \$4 per hour). So the amount that a company contributes to its pension plan is based on the number of hours worked by its employees in the plan multiplied by the hourly rate. For example, if a company's employees work a cumulative 1 million hours during the year and the hourly rate is \$4 per hour, the company will contribute \$4 million (1,000,000 hours x \$4 per hour) to the multiemployer plan (contributions are typically made on a monthly basis). The contribution to a multiemployer pension plan is run through the income statement as a compensation cost (like a defined contribution plan) and is tax deductible. Contributions to the plan by one company can be used to pay benefits to the workers of another company. Keep in mind that if a company stops contributing to a plan, the underfunding is the responsibility of the remaining companies in the pension plan. If there is only one participant remaining in the plan, they would be considered the "last man standing."

Multiemployer pension plans are also subject to minimum funding requirements that were tightened by the Pension Protection Act (see our August 14, 2006 report, *Pension Protection Act, Pension Funding Rules, Basketballs, and Camel Hair, Too*). You can think of the minimum required contribution to a multiemployer pension plan as the normal cost of the plan (i.e., service cost, the amount of pension benefit the employees earned by working that year) plus supplemental costs (plan underperformance, increased liabilities due to plan amendments, previously waived minimum contributions and losses due to changes in actuarial assumptions all paid back over 15 years). If the amount contributed to the plan plus any funding credits (i.e., past contributions that were greater than what was required) is less than the normal cost plus supplemental costs the plan has something called an accumulated funding deficiency or unpaid required contributions (which can cause some problems, see below).

**Red Zone is Bad, Green is Good**

Generally speaking, multiemployer pension plans that are better than 80% funded are considered healthy, or in the green zone. Those below 80% funded are financially troubled and can be grouped into three buckets: endangered (yellow), seriously endangered (orange) and critical (red). Multiemployer pension plans that are less than 80% funded or that have an accumulated funding deficiency (see definition above) are considered

endangered or code yellow. Plans that meet both conditions are “seriously endangered” they’re code orange. Code red or critical status is reserved for those plans that are less than 65% funded (or meet certain other criteria). A word of caution, the funded status used to determine whether a plan is healthy or not is based on a bit of actuarial hocus-pocus. Instead of using the fair value of the pension plan assets, an actuarial value (think, average) is used that can be smoothed over five years and instead of using current interest rates, the expected return on the plan assets is used as the discount rate to measure the pension obligation (i.e., accrued pension liability). In other words the funded status doesn’t reflect the actual health of the pension plan, its actuarial make believe. Exhibit 11 provides a brief summary of the different multiemployer pension funding zones.

**Exhibit 11: Multiemployer Pension Plan Rainbow**

Funding Zone	Healthy (Green)	Endangered (Yellow)	Seriously Endangered (Orange)	Critical (Red)
Funded %	>=80%	65%–80%	65%–80%	<65%
Other Criteria		Or the plan has an accumulated funding deficiency or is expected to have one during any of the next six years	And the plan has an accumulated funding deficiency or is expected to have one during any of the next six years	And the market value of plan assets plus the present value of contributions over the next seven years is less than the present value of benefits payable over the next seven years.  Critical status is also triggered if any of three additional criteria are met.
Additional Contributions		<b>Funding Improvement Plan</b>  Increase future contributions and/or reduce future pension benefit accruals to improve plan’s health.  Funded status of the plan must improve by one-third within 10 years	<b>Funding Improvement Plan</b>  Increase future contributions and/or reduce future pension benefit accruals to improve plan’s health.  Funded status of the plan must improve by one-fifth within 15 years	<b>Rehabilitation Plan</b>  Increase future contributions and/or reduce future pension benefit accruals to improve plan’s health. Can also cut previously earned “adjustable” benefits (e.g., early retirement).  Plan must emerge from critical condition within 10 years

Source: Internal Revenue Code Section 432, Credit Suisse Accounting & Tax Research

The distinction between healthy and financially troubled plans is important because financially troubled plans can be subject to additional funding requirements. For example, endangered plans (yellow) must adopt a *funding improvement plan* that will result in the pension plan’s funded status improving by one-third over ten years (e.g., a plan that is 76% funded would need to get to 84% funded within 10 years). Plans that are seriously endangered (orange) get 15 years to boost the funded status by one-fifth (e.g., a plan that is 70% funded would need to improve to 76% funded within 15 years). As part of the funding improvement plan the trustees will propose reducing future pension benefit accruals (i.e., employees will earn less of a pension going forward) and increasing future contributions to get the plan healthier. Then it’s up to the bargaining parties (labor and management) to agree on a funding improvement plan. If they can’t agree then future benefit accruals are cut and the plan may get hit with excise taxes and penalties.

Multiemployer pension plans that are in critical condition (red) must adopt a *rehabilitation plan* that will result in the pension plan emerging from critical condition within 10 years. The rehab plan can even include a cut to previously earned “adjustable” benefits (e.g., early retirement benefits, post-retirement death benefits and disability benefits) in addition to a reduction in future benefit accruals and an increase in contributions. Until a rehab plan is put in place companies are subject to an additional contribution (surcharge) of 5% of contributions in the first year and 10% each year thereafter.

Keep in mind that the rules regarding additional contributions sunset at the end of 2014, however, any funding improvement or rehab plans in place at that time would continue beyond 2014.

If you're interested in seeing a list of multiemployer plans that are endangered or have entered into critical status, check out the Department of Labor website at <http://www.dol.gov/ebsa/criticalstatusnotices.html>.

### **Pension Funding Relief, Playing Kick the Can**

As the health of defined benefit pension plans has deteriorated, Washington DC has tried to help out by providing various forms of pension funding relief (the most recent proposal would result in higher discount rates, smaller pension obligations on a present value basis and reduced funding requirements). Remember, pension funding relief does not change the company's true pension obligation (the retirement benefits that will eventually be paid to pension plan participants) it only delays the timing of when those benefits must be funded. It's just kicking the can down the road; reducing the funding requirements in the short-term could result in larger funding requirements in the future (see our March 10, 2010 report, *Pension Funding Relief, Again, Kicking the Can Down the Road*).

Multiemployer plans have gotten in on the act too. The Worker, Retiree, and Employer Recovery Act of 2008 allowed multiemployer plans to pretend (temporarily) that the funded status of their plans had not changed from the prior year (just imagine if you could have done that with your portfolio in 2008) it also provided a three year extension to the funding improvement and rehab periods. More recently the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010 allowed multiemployer plan investment losses from 2008 and 2009 to be spread over 30 years instead of 15 years it also provided some added smoothing when measuring the plan assets.

### **Don't Forget About the Withdrawal Liability**

In addition to the funding requirements don't forget that companies are also on the hook for a withdrawal liability, that's the amount that they would have to pay to get out of a multiemployer pension plan. The withdrawal liability is typically based on the company's share of the plan's unfunded vested benefits. For example, UPS paid \$6.1 billion in 2007 to withdraw from the Central States Pension Fund. Companies can also get hit with a partial withdrawal liability if for example their contribution base (e.g., number of hours worked by their employees in the plan) drops by 70% or more.

A withdrawal liability is not due all at once, the amount paid each year (usually payable quarterly) is based on the contributions the company had been making to the plan. However, the liability must be paid within 20 years.

### **What Happens if a Multiemployer Plan Goes Bust?**

A multiemployer pension plan is considered insolvent by the PBGC when the plan does not have enough assets to pay benefits (now that's a poorly funded pension plan). Plan insolvency triggers the PBGC's guarantee and loans are provided to the plan (those loans are rarely repaid) to help it pay guaranteed benefits (up to \$12,870 per year). The loans are funded by the insurance premiums that the PBGC collects from multiemployer plans of \$9 per participant.

**Companies Mentioned** (Price as of 23 Mar 12)

Alpha Natural Resources (ANR, \$15.98, NEUTRAL [V], TP \$22.00)  
 CONSOL Energy Inc. (CNX, \$33.76, OUTPERFORM, TP \$45.00)  
 Dean Foods Company (DF, \$12.24, NEUTRAL, TP \$13.00)  
 Quanta Services (PWR, \$21.41, OUTPERFORM, TP \$26.00)  
 Safeway Inc. (SWY, \$21.13, OUTPERFORM, TP \$26.00)  
 United Parcel Service Inc. (UPS, \$79.71, OUTPERFORM, TP \$92.00)  
 United States Steel Group (X, \$29.74, NEUTRAL [V], TP \$35.00)

## Disclosure Appendix

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