

# Why I'm Again Short Lumber Liquidators – In a Word: Cancer

Whitney Tilson  
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This presentation and my three prior ones are posted at:  
[www.tilsonfunds.com/LL.pdf](http://www.tilsonfunds.com/LL.pdf)  
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# Lumber Liquidators' Stock Is Down Nearly 90% Since I First Presented It



Note: I first presented this as my favorite short idea at the Robin Hood Investors Conference in November 2013.

Source: BigCharts.com.

I published an article in December explaining why I was exiting my short position in Lumber Liquidators. Here's the summary:

- I received information that leads me to believe that senior management of Lumber Liquidators wasn't aware that the company was selling Chinese-made laminate that had high levels of formaldehyde
- If this information is correct, then the company was sloppy and naïve, but not evil
- If there are no "smoking gun" documents/emails, then the doomsday scenario for the company (and the stock) is less likely

At the time, LL also had a net cash position and I thought that:

- Formaldehyde off-gassed to normal levels within 3-10 months
- There was little/no cancer risk
- The operating performance of the business might improve, if not in Q4 then certainly once the company started to lap the March 1, 2015 first airing of the 60 Minutes story

Based on the information I had at the time, it was a good decision to cover.

# Summary of Why I Put the Short Back On

I continue to believe that LL's senior management was unaware of the toxic laminate and thus no longer believe this company is evil, plus the stock is now a bit lower, so why have I reestablished a meaningful short position (my largest at 4+%)?

Very simply, I have new information that leads me to believe that the odds of very bad outcomes for Lumber Liquidators and its stock have risen materially based on new information in six areas:

1. Widespread media coverage of the CDC's error and increased cancer risk appears to be having a severe impact on the business
2. The cancer risk is likely significantly greater than even the CDC's revised estimate, which could result in further damaging publicity and increased liabilities
3. A "Prop 65" trial has just begun that LL is likely to lose, resulting in further adverse publicity
4. Likelihood of even larger legal and regulatory liabilities
5. Operating performance of the business in Q4 was much worse than I expected – and I think meaningful improvement is unlikely for quite some time (if ever)
6. Lack of confidence in company leadership



# I Now Believe There Is at Least a 50% Chance That Lumber Liquidators Eventually Goes Bankrupt



I now believe that there is at least a 50% chance that LL eventually goes bankrupt (despite the fact that the company had \$6.7 million of net cash and \$67.2 million available on its line of credit at the end of Q4, and, under normal circumstances, a nicely profitable business), for the following reasons:

- I think operating losses and cash burn will remain severely negative (in the range of Q4's -\$20-\$30 million per quarter) for the foreseeable future – and could even get worse
- It will likely be very difficult and expensive to settle the regulatory issues (Consumer Product Safety Commission, CA Air Resources Board, etc.) as well as class action (multi-district litigation), securities fraud, and Prop 65 cases, especially in light of the CDC recently tripling its exposure and cancer risk estimate, as well as the fact that more than *one million* Americans may have been exposed to LL's Chinese-made laminate since 2010
- LL's liability insurers have all denied coverage for the formaldehyde claims under the pollution exclusion in the insurance policies, forcing LL to pay its enormous legal fees out of pocket

# More Than 1 Million Americans May Have Been Exposed to LL's Chinese-Made Laminate Between 2010 and May 7, 2015

Year	Total Sales (\$M)	Laminate as % of Total Sales	% of Laminate from China	Sales of Chinese-made Laminate (\$M)	Average Ticket (Laminate)	Customers Who Bought Chinese-made Laminate	People Exposed
2010	\$620	21%	46%	\$60	\$1,216	49,276	125,160
2011	\$682	23%	70%	\$110	\$1,248	87,929	223,340
2012	\$813	22%	60%	\$107	\$1,280	83,874	213,040
2013	\$1,000	20%	55%	\$110	\$1,364	80,665	204,888
2014	\$1,047	19%	52%	\$103	\$1,340	77,228	196,158
Jan-May 7, 2015						<u>19,942</u>	<u>50,652</u>
<b>TOTAL:</b>						<b>398,913</b>	<b>1,013,238</b>

## Assumptions/estimates:

- LL finally suspended sales of Chinese-made laminate on May 7, 2015
- For 2012 and 2013, laminate sales and percent from China are estimates
- Average Ticket (Laminate) is an estimate based on 80% of the total ticket (laminate is cheaper than engineered and solid hardwoods)
- People exposed is customers x 2.54 residents per household (US Census)
- January – May 7, 2015 assumes that sales continued at 2014 levels in January and February and then fell by half after the 60 Minutes story aired on March 1, 2015



# **Widespread Media Coverage of the CDC's Error and Increased Cancer Risk Appears to Be Having a Severe Impact on the Business**



# Severe Impact of Recent Publicity About a Cancer Scare



- Even though comps are now much easier now that we've just passed the one-year anniversary of the first airing of the 60 Minutes story, I believe that Lumber Liquidators' sales will not recover in the first half of this year, possibly longer, due to a recent well-publicized cancer scare
- According to my sources, the recent publicity has had a hugely deleterious impact on Lumber Liquidators – possibly even exceeding what happened in the aftermath of the initial 60 Minutes story
- As we've seen over the past year, adverse publicity linking a Lumber Liquidators product to formaldehyde has severely damaged the business – but, let's be honest, while exposure to this chemical sounds sort of scary, most people don't know much about it. And to the extent they do, the primary symptoms – irritation of the eyes, nose and throat – don't sound like cause for alarm
- But everyone knows about – and is rightly terrified of – cancer. Thus, a Lumber Liquidators' product (even one it no longer sells) becoming very publicly associated with increased cancer risk could be a mortal blow to the company

# The CDC's Initial Report Was Moderately Favorable for Lumber Liquidators (1)



- Last month the Centers for Disease Control and Prevention (CDC) released the results of the Consumer Product Safety Commission's tests of Lumber Liquidators' Chinese-made laminate flooring
- It was mostly good news for the company
- Though the report found elevated levels of formaldehyde, in its conclusions the CDC seemed to be trying to downplay the risks and reassure homeowners
- While acknowledging that "The amount of formaldehyde released could cause health symptoms in some people," the media focused on this line: "The added cancer risk from exposure to formaldehyde released from the floorboards is small."
- Importantly (and, I believe, wrongly, as discussed later in this presentation), the CDC assured homeowners that if their flooring is more than two years old, the formaldehyde had likely "off-gassed" down to a normal level: "Several studies have shown that formaldehyde levels return to normal levels about 2 years after formaldehyde-emitting products are installed in a home."

# The CDC's Initial Report Was Moderately Favorable for Lumber Liquidators (2)



- The CDC calculated that “the cancer risk from the off-gassing floorboards is 2 [to 9] additional cases of cancer per 100,000 people exposed” [20-90 per million] and reassured homeowners: “To put those numbers in perspective, the American Cancer Society ([www.cancer.org](http://www.cancer.org)) estimates that for people living in the United States, one in two men and one in three women will develop cancer from all causes.”
- In its recommendations, the CDC suggested that homeowners should see a doctor if they have symptoms related to indoor air quality, and take steps to reduce the concentration of formaldehyde in the air (increase ventilation, lower temperature and humidity, cease smoking indoors, etc.).
- But the CDC pooh-poohed the idea of widespread air testing (“Generally residents do not need to consider testing the air in their homes, especially if the flooring was installed more than two years ago.”) or replacing any flooring:

***Residents should consider the following before removing this type of laminate flooring from their homes:***

- *If the flooring was installed more than 2 years ago, the levels of formaldehyde have most likely returned to what is normally found in homes — so there is probably no reason to remove it.*
- *Removing laminate flooring may release more formaldehyde into the home. Some new flooring may also release formaldehyde.*
- *Consult a certified professional (such as a CIH or REHS/RS) before taking any action to remove the flooring.*

# The CDC's Initial Report Was Moderately Favorable for Lumber Liquidators (3)



- The media coverage of the report was minimal and, in general, quite favorable, highlighting that the cancer risk is de minimis and most homeowners don't have to test the air much less replace the flooring
- Not surprisingly, the stock rose ~20% in the next few days
- The CDC report was consistent with my view (until recently) that the cancer risk was insignificant
  - In an article I published on April 9, 2015, I wrote: “formaldehyde, at the levels and length of exposure at issue here, is unlikely to cause cancer” and concluded that “Lumber Liquidators’ problem, while serious, isn’t as serious as asbestos”



# Then 60 Minutes Showed That the CDC Had Made a Terrible Mistake: Actual Formaldehyde Levels Were 3.3x Higher, Meaning There Was “Triple the Cancer Risk”



It turns out that the CDC made a major computational error: its analysts calculated the formaldehyde concentration in the test room based on a ceiling height of eight *meters* instead of eight *feet*!

60 Minutes learned of the CDC's mistake and on Sunday, February 21<sup>st</sup>, Anderson Cooper gave the following update:

After our story aired last March, the Consumer Product Safety Commission, working with the Centers for Disease Control, launched a study of that laminate flooring. This month, the government published its findings. They showed the flooring gave off enough formaldehyde to irritate the eyes, nose and throat, and could trigger breathing problems. It also increased cancer risk by a small amount.

After the report was published, 60 Minutes was alerted to the possibility that government scientists made a major mathematical mistake in their report. We sent the report to scientists at several universities and discovered the government forget to convert feet to meters in some calculations.

That error means that *all* the predicted formaldehyde levels from Lumber Liquidators' flooring are 3.3 times *higher* than government scientists calculated, which can amount to more than 18 times higher levels of formaldehyde than those in a normal home and triple the cancer risk to a level that's considered unacceptable by national and international health agencies.

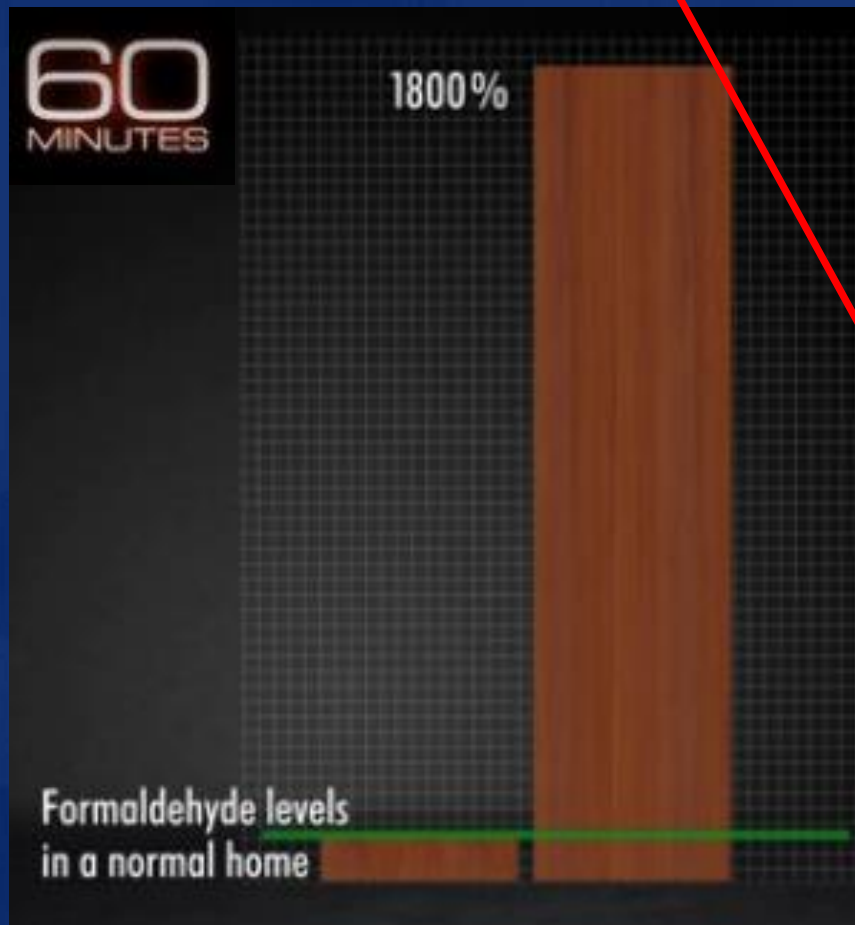
The Centers for Disease Control has admitted its mistake and issued a correction.

The Consumer Product Safety Commission is continuing its investigation and told us it's working to provide more specific answers to homeowners about the safety concerns.



# As Cooper Read the Update, Two Scary, Rising-Bar Graphics Appeared in the Background

- In addition to Cooper saying “triple the cancer risk”, the chart on the right says: “Additional cancer risk”



# The CDC Admitted Its Error and Increased Its Estimate of Cancer Risk, Leading to Extensive, Damaging Media Coverage



- The CDC issued a press release on 2/18 admitting its error and tripling its formaldehyde exposure and cancer risk estimates:
  - “CDC/ATSDR was notified February 13 of an error in its report released February 10, 2016, about the possible health effects from exposure to formaldehyde emitted from select laminate flooring samples. Health risks of people who have the laminate flooring are being revised to reflect greater exposure to formaldehyde, which could cause eye, nose, and throat irritation for anyone. The estimated risk of cancer associated with exposure to the flooring increased.  
The CDC/ATSDR indoor air model used an incorrect value for ceiling height. As a result, the health risks were calculated using airborne concentration estimates about 3 times lower than they should have been...After correcting the measurement in the model, CDC/ATSDR is revising the possible health effects...The estimated risk of cancer is 6-30 cases per 100,000 people [60-300 per million].”
- In the days after the 60 Minutes’ story and the CDC’s correction, there was a media frenzy, including stories on every major evening news program
- Unlike the first round of (limited) publicity, the focus was on the increased cancer risk
- The next day, the stock dropped 20% to around \$11

# The Impact on Lumber Liquidators Appears to Be Significant



- Keep in mind that this is anecdotal, but my best source\*, whose information is consistently accurate, tells me that this wave of publicity has had a hugely deleterious impact on Lumber Liquidators, possibly even exceeding what happened in the aftermath of the initial 60 Minutes story a year ago
- The impact is in three primary areas:
  1. Sales are down because customers are avoiding Lumber Liquidators
  2. Customers with Lumber Liquidators' flooring are returning it (if not yet installed) or demanding that it be removed
  3. Lumber Liquidators' employees are demoralized and looking to leave

\* My source is an industry veteran whose information and anecdotes are derived not from anyone at Lumber Liquidators itself, but from installers and others who have had interactions with the company.

- A store manager on the east coast said that sales in January and February were the two worst months in the history of the store – and then things got *worse*! He said the week after the 60 Minutes update and resulting cancer scare was the “worst experience of his life.” In the first two days of March the store actually had *negative revenue* due to returns.
- At another store, the incoming phone calls were so intense and frequent that the store manager unplugged it and threw it in the warehouse.
- On Tuesday, February 23<sup>rd</sup> (two days after the 60 Minutes update aired), one store had a long line of people returning product – a total of \$10,000-\$11,000 just that morning.
- Last week, the store manager of a competitor, whose store is directly across the street from a LL store, looked over a half dozen times during the day and on at least two occasions saw trucks pulling in with product but leaving with nothing (i.e., returns). At least one customer came into the competitor’s store that day saying he had cancelled his order with LL and just wanted something “non-toxic”! The competitor says this is now a regular occurrence.

# Anecdotes – From Customers



- My source has heard multiple stories of LL's customers who are so desperate to get this "crap" out of their homes to protect the health of themselves and their families that they're paying for removal themselves, even though they doubt that they'll get a refund or any reasonable remedy from LL. They just don't want a carcinogenic floor.
- A customer showed up absolutely livid because she felt that the LL store manager had deceived her when he told her in January that the laminate floor she had purchased had been discontinued. She later learned that it had been pulled because it was toxic. The manager recounted this story to an installer and confessed, *"You know what, she's right. I lied to her. I feel so bad. I can't keep doing this."*
- A customer showed up with documentation showing that he had bought a floor from Lumber Liquidators in 2011-12, and last year his dog died from some strange cancer. Now he says he "knows what happened!"



# **The Cancer Risk Is Likely Significantly Greater Than Even the CDC's Upwardly Revised Estimate**

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# I Believe That the CDC Is Significantly Understating the Formaldehyde Exposure



- I believe that the CDC's report, even after adjusting it to increase formaldehyde levels by 3.3x, significantly understates the actual amount of formaldehyde that homeowners are exposed to, for two reasons:
  1. The CDC did two types of tests, small chamber and large chamber, and appeared to weight them equally
    - I believe that the large chamber test, which showed ~6x higher formaldehyde levels, is far more realistic and therefore that these results should be used to calculate risks of adverse health effects
  2. The CDC assured homeowners that if their flooring is more than two years old, the formaldehyde had likely off-gassed down to a normal level: "Several studies have shown that formaldehyde levels return to normal levels about 2 years after formaldehyde-emitting products are installed in a home."
    - I believe this statement is incorrect; my analysis of the research regarding how quickly formaldehyde off-gasses leads me to believe that elevated (and dangerous) levels of formaldehyde persist for far longer than two years – and thus the cancer risk is much greater

# Large Chamber Testing Is Far More Realistic and Thus Should Be Weighted Much More Heavily



- The small chamber test involves placing a piece of flooring in a small device (which ranges in size, but think the size of a microwave oven) and measuring the formaldehyde emitted
  - However: according to the CDC report, “The edges of the laminate flooring samples were sealed with aluminum tape to cover exposed edges in compliance with the small chamber test sampling method during analysis.”
  - *Test data shows that the vast majority of the formaldehyde emitted by flooring comes from the edges, which are not sealed when flooring is installed*
- The large chamber test, according to the CDC report, “is intended to measure emissions from floorboards *under conditions that mimic product installation in homes*. The large chamber allows a larger sample, which means that *boards are assembled as they would be in a home*, that is, with seams and unsealed edges.” (emphasis added)
- Clearly the large chamber test is far better at measuring the actual level of formaldehyde a homeowner is exposed to, and thus should be weighted much more heavily
- The small-chamber tests (33 tests of 11 samples) showed average emissions of 40 micrograms per square meters of material per hour ( $\mu\text{g}/\text{m}^2\text{-hr}$ ) (median: 63)\*
- The large-chamber tests (10 tests of 5 samples) averaged 252  $\mu\text{g}/\text{m}^2\text{-hr}$  (median: 321)\* – *approximately six times higher than the small-chamber results*

\* These figures are actually 3.3x higher due to the CDC's calculation error.

# Formaldehyde Likely Does *Not* Off-Gas to Normal Levels Within Two Years



- In its report, the CDC, based on three studies, assured homeowners that if their flooring is more than two years old, the formaldehyde had likely off-gassed down to a normal level:
  - “Research suggests that formaldehyde levels in recently built or renovated homes dissipate within the first two years after installation of formaldehyde-containing materials (Brown, 2002; Park and Ikeda, 2006; Wolkoff et al., 1991), reaching background (“normal”) levels of indoor formaldehyde within the initial off-gassing period of two years.”
- I believe that the CDC is misinterpreting the three studies it cites
- In reality, I believe that elevated (and dangerous) levels of formaldehyde likely persist for longer – perhaps far longer – than two years
- Therefore, the cancer risk is far greater than even the higher, revised estimate by the CDC of 60-300 per million

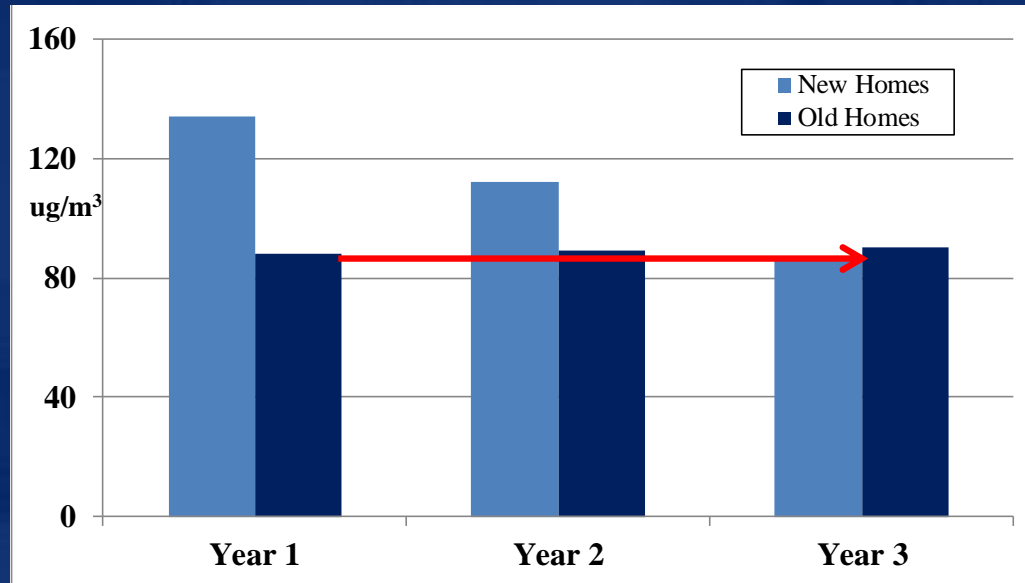
# The CDC Appears to Be Misinterpreting Studies on How Quickly Formaldehyde Off-Gasses (1)



- The Brown study shows that while formaldehyde levels do indeed initially decay quickly (by 38-53% in the first 35 weeks), the emissions thereafter remain essentially constant
- The Wolkoff study of occupied and unoccupied apartments shows that formaldehyde decreases by 68-73% within one month – but then not only doesn't decline further, but actually *increases* – by 25% in the occupied apartment and, in the case of the unoccupied apartment during spring and summer months, back above the initial level

# The CDC Appears to Be Misinterpreting Studies on How Quickly Formaldehyde Off-Gasses (2)

- The Park & Ikeda study shows a 36% decline in formaldehyde emissions for new homes (<6 months), but old homes (>6 months) showed no decline:



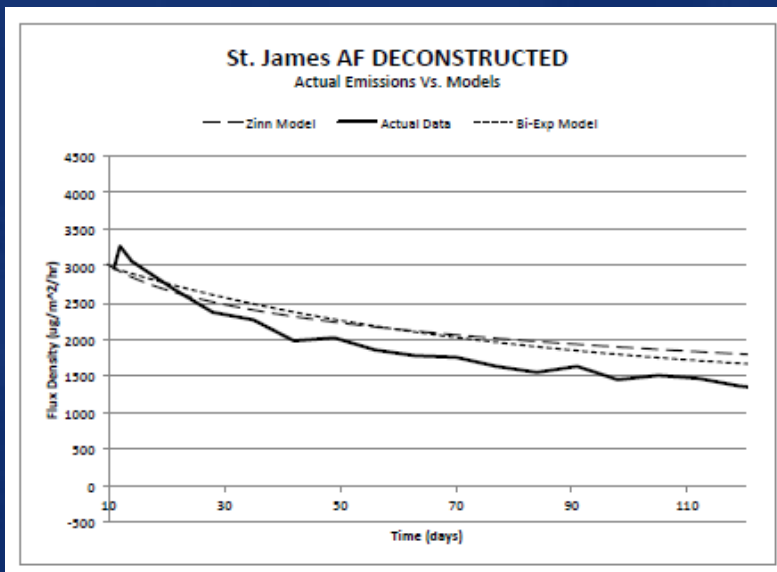
- Importantly, the year 3 value for both old and new homes,  $\sim 90 \mu\text{g}/\text{m}^3$ , would, over a lifetime, using the CDC's metrics, translate into an excess cancer risk of approximately *1,170 per million*

# Lumber Liquidators' Expert Uses Unrealistic Assumptions to Conclude That Formaldehyde Off-Gases Quickly

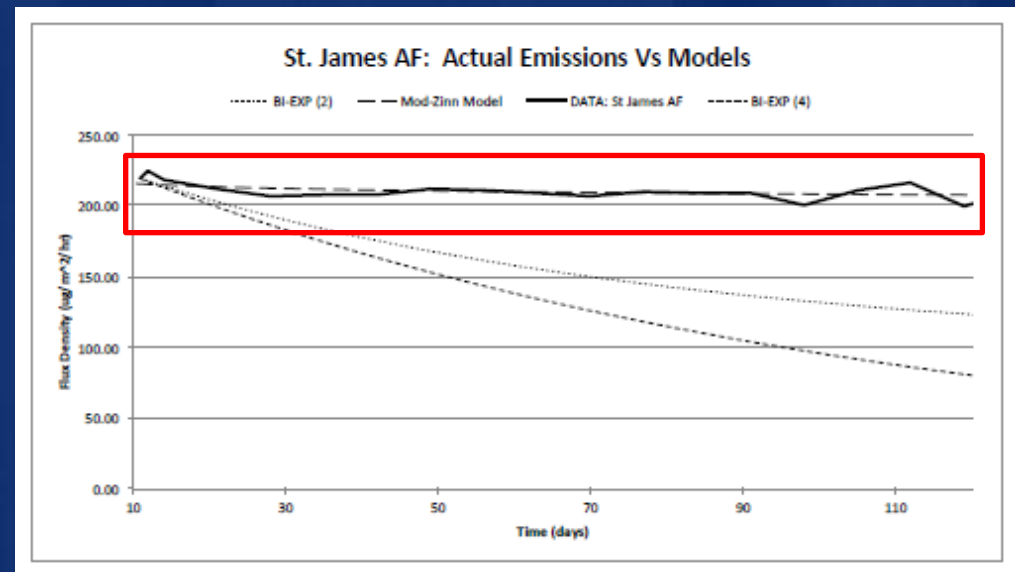


- Based on tests of raw particleboard, LL's expert calculates that formaldehyde emissions decline quickly (left chart)
- But *actual LL laminated product* shows little/no decline in the first four months (right chart), which makes sense as the laminate seals in most of the formaldehyde

## Raw Particleboard



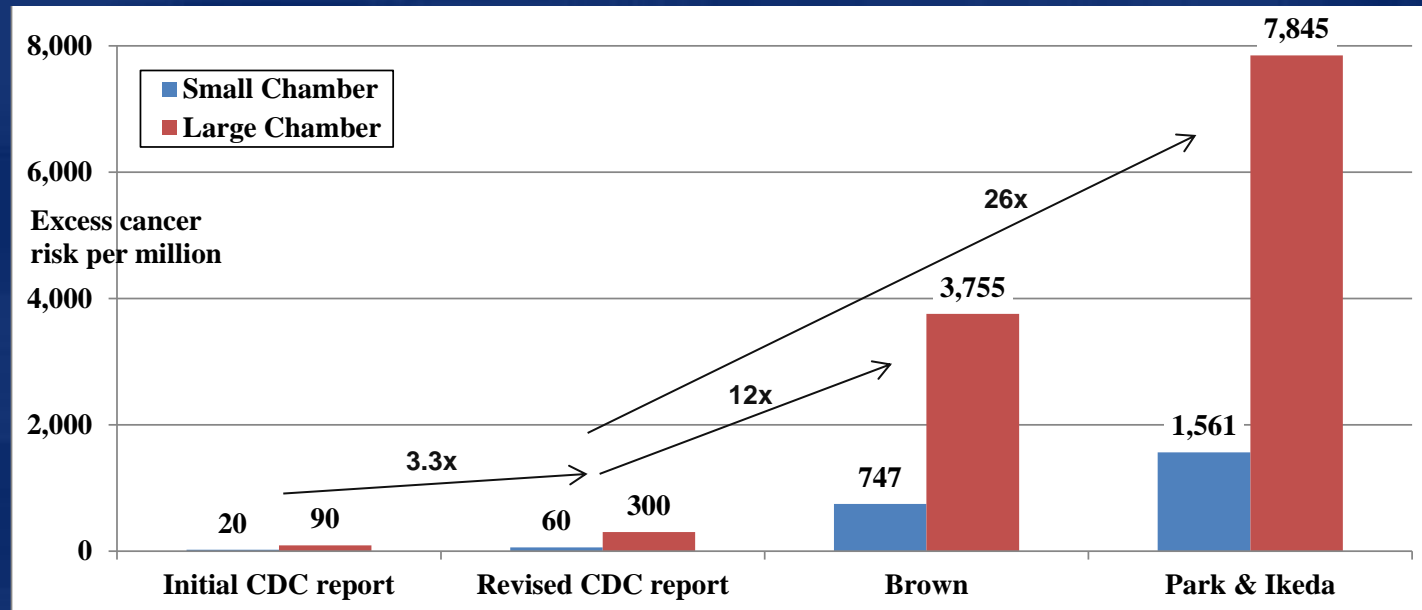
## Actual LL Laminated Product





# The Actual Cancer Risk May Be Far Higher Than Even the New CDC Estimates

- After correcting its error, the CDC's revised estimate triples the risk of cancer to "6-30 cases per 100,000 people" [60-300 per million]
- But the actual risk may be far higher because the CDC continues to assume "that formaldehyde levels return to normal levels about 2 years after formaldehyde-emitting products are installed in a home."
- As shown on prior pages, this is likely an incorrect assumption
- If one applies the formaldehyde levels that persist over extended periods, as predicted by the Brown and Park & Ikeda studies, to the small and large chamber test results of LL's Chinese-made laminate, the excess cancer risk skyrockets:



# The CDC Should Issue Another Correction



- The evidence appears clear that the CDC is incorrect in:
  - 1) Giving equal weight to small- and large-chamber tests; and
  - 2) Assuming that formaldehyde off-gasses to normal levels within two years
- Consequently, the actual cancer risk appears to be *12-26 times higher* than the CDC's current estimate of 60-300 per million

**A Prop 65 Trial Has Just Begun That  
Lumber Liquidators Is Likely to Lose,  
Resulting in Further Adverse Publicity**

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# Prop 65 Is a California Environmental Law That Lumber Liquidators Likely Violated



- In 1986, California voters approved an initiative to address their growing concerns about exposure to toxic chemicals. That initiative became the Safe Drinking Water and Toxic Enforcement Act of 1986, better known by its original name of Proposition 65. Proposition 65 requires the State to publish a list of chemicals known to cause cancer or birth defects or other reproductive harm. This list, which must be updated at least once a year, has grown to include approximately 800 chemicals since it was first published in 1987
- Formaldehyde (gas) was added to the list on 1/1/88 because it can cause cancer
- Proposition 65 requires businesses to notify Californians about significant amounts of chemicals in the products they purchase, in their homes or workplaces, or that are released into the environment
- Prop 65 allows “any private person proceeding ‘in the public interest’” to sue any entity suspected of violating the law
- All a plaintiff has to do is prove that a product contains one of the toxic chemicals on the list, and then the burden shifts to the defendant to prove that the amount of the chemical being emitted by the product falls below the No Significant Risk Level (NSRL) established by the state
- Damages can include civil penalties of \$2,500 per day per violation, subject to a one-year statute of limitations

# Lumber Liquidators Faces a Prop 65 Lawsuit



- Global Community Monitor, a California-based environmental organization, and Sunshine Park LLC, an entity formed by one or more anonymous hedge funds, have filed a Prop 65 lawsuit against Lumber Liquidators
  - I have had no contact with GCM nor the hedge fund(s) and don't know who they are
- I have posted the trial briefs here:
  - Plaintiffs' trial brief: [www.tilsonfunds.com/GCMbrief.pdf](http://www.tilsonfunds.com/GCMbrief.pdf)
  - Defendant's (Lumber Liquidators') trial brief: [www.tilsonfunds.com/LLbrief.pdf](http://www.tilsonfunds.com/LLbrief.pdf)
- GSM is asking for the following damages:
  - A recall of the toxic flooring
  - Reimbursement of attorney's fees
  - A penalty of \$2,500/day per violation
    - I estimate that LL sold Chinese-made laminate to ~80,000 customers nationwide per year. If California was 12% of the total, that's 9,600 customers. At \$2,500 each, that's \$24 million/day or *\$8.8 billion* over one year!

# The Trial Phase of a Prop 65 Lawsuit Against Lumber Liquidators Began Last Week



I asked Alexander Robertson of Robertson & Associates, a lawyer who is very familiar with this case, to comment. He replied:

- The trial is bifurcated into liability (phase 1) and damages (phase 2)
- The liability phase is estimated to last three weeks
- A judge (not jury) will decide whether 26 varieties of LL's Chinese-made laminate contain formaldehyde levels that exceed the 40 micrograms per day ( $\mu\text{g/day}$ ) that Prop 65 has established as the No Significant Risk Level (NSRL) for formaldehyde
- Plaintiffs' 400+ tests, conducted at certified laboratories, show that the products initially exceed this level by an average of 600%
- LL's own expert calculates an even *higher* initial level, but argues, desperately and unconvincingly, that the formaldehyde off-gasses very quickly and most people sell their homes in within nine years so lifetime exposure doesn't apply
- The Prop 65 law neuters this argument, however, because it established the NSRL's assuming a 70-year exposure based on current emission levels
- LL will lose this trial and, even before the damages phase starts, the headlines will be that a judge has determined that LL's laminates were toxic
- This further adverse publicity will likely further impact sales to new customers and cause even more panic among prior Lumber Liquidators' customers, who will demand refunds and replacement flooring



# Likelihood of Even Larger Legal and Regulatory Liabilities



# Lumber Liquidators Faces Enormous Legal and Regulatory Liabilities



- LL settled Lacey Act violations (related to illegally harvested hardwoods) with the Department of Justice last October for \$13.2 million
- But the company has yet to reach settlements with any of the regulators or lawyers related to formaldehyde – and the CDC recently tripling the exposure level and cancer risk by 3.3x will make undoubtedly make settlements that much more difficult and expensive to achieve
- The amounts at stake here could make the cost of the Lacey Act settlement look like chump change
- And if the CDC revises the risk upward again, as I believe it should, then all bets are off

# Lumber Liquidators Faces Multiple Legal Liabilities



Potential legal liabilities include:

- The Prop 65 lawsuit discussed earlier
- A class action (multi-district litigation) lawsuit seeking monetary damages for customers to remove and replace toxic flooring
  - I heard last month from two sources that Lumber Liquidators was close to a settlement that would have provided customers with a store credit for replacement flooring, but I suspect this option is no longer viable
- Securities fraud lawsuits claiming that LL concealed material information about the formaldehyde problem from shareholders
  - Damages are shareholders' losses based on the drop in stock price
  - From its peak, LL has lost more than \$3 billion in market cap
- Compensation to customers who've suffered adverse health effects
  - In addition to cancer, other symptoms, according to the CDC report, include: "asthma symptoms and other respiratory issues for people with asthma and COPD" and "eye, nose, and throat irritation for anyone"
  - While I am not aware of any mass torts related to cancer or other adverse health effects, with ~1 million people exposed since 2010, I think there will likely be many lawsuits around this

# Lumber Liquidators Faces Multiple Regulatory Liabilities As Well



Regulators could require Lumber Liquidators to:

- Pay large fines
- Contact all customers who purchased LL's Chinese-made laminate, warn them of the risks, and offer them proper testing (estimated cost: ~\$1,500/home)
  - If 10% of the 400,000 customers who purchased LL's Chinese-made laminate since 2010 demand proper testing, that's \$60 million
- Tear out and replace all floors emitting high levels of formaldehyde (~\$3,500/home\*)
  - If 3% require remediation, that's another \$42 million\*\*

\* Former LL CEO Rob Lynch stated on the 3/12/15 Business Update Conference Call: "Once the full analysis of the home's air quality is completed and if the customer is still not satisfied, we will consider a reinstallation, the cost of which is expected to range from \$3,000 to \$4,000."

\*\* In LL's "Update on Laminate Flooring Source from China" press release dated 5/7/15, the company stated that 97% of the test kits showed indoor air concentrations of formaldehyde that were within World Health Organization guidelines (meaning 3% were higher). I think the actual number is much higher, but am using 3% to be conservative.

# Regulators Should Require Lumber Liquidators To Take a Number of Steps



Regulators should require Lumber Liquidators to do what any honest and reputable company would have immediately done:

- 1) Offer a full refund to any customers who want to return Chinese-made laminate that was purchased prior to 5/7/15 (when LL finally suspended sales of this product)
- 2) Rather than waiting for inbound calls and complaints, Lumber Liquidators should send a letter to every customer who purchased its Chinese-made laminate flooring between, say, 2010 and 5/7/15, informing them that the product may be emitting dangerous levels of formaldehyde and offering a proper test
- 3) Cease the bogus “Bio-Badge” formaldehyde testing program that it’s currently offering customers (see my article, *Lumber Liquidators’ Offer to Do Indoor Air Quality Testing Appears to Be a Sham*), and instead offer to send a trained specialist with sophisticated equipment to do proper testing
- 4) For any customers with a reading above 0.016 parts per million (16 ppb or  $20 \mu\text{g}/\text{m}^3$ ), the standard set by both FEMA and NIOSH (I’m being generous – 7 ppb is the limit set by the California Office of Environmental Health Hazard Assessment; for more on this, see my article, *More On Lumber Liquidators And Formaldehyde*), offer to pay all costs for them to, if they wish, temporarily move out of their home until the flooring can be removed and replaced with safe flooring; also, for these customers, offer to pay all medical bills for anyone in the home suffering symptoms consistent with formaldehyde exposure
- 5) Establish a fund to pay for future health costs of customers who suffer adverse health effects associated with exposure to formaldehyde

(Beyond formaldehyde, if they’re really feeling ambitious, regulators should require LL to address chronic quality problems with its Morningstar bamboo flooring, which is notorious for creaking, cracking, warping and shrinking, especially in warm and humid areas.)

**Operating Performance of the Business in  
Q4 Was Much Worse Than I Expected –  
And I Think Meaningful Improvement Is  
Unlikely for Quite Some Time (If Ever)**

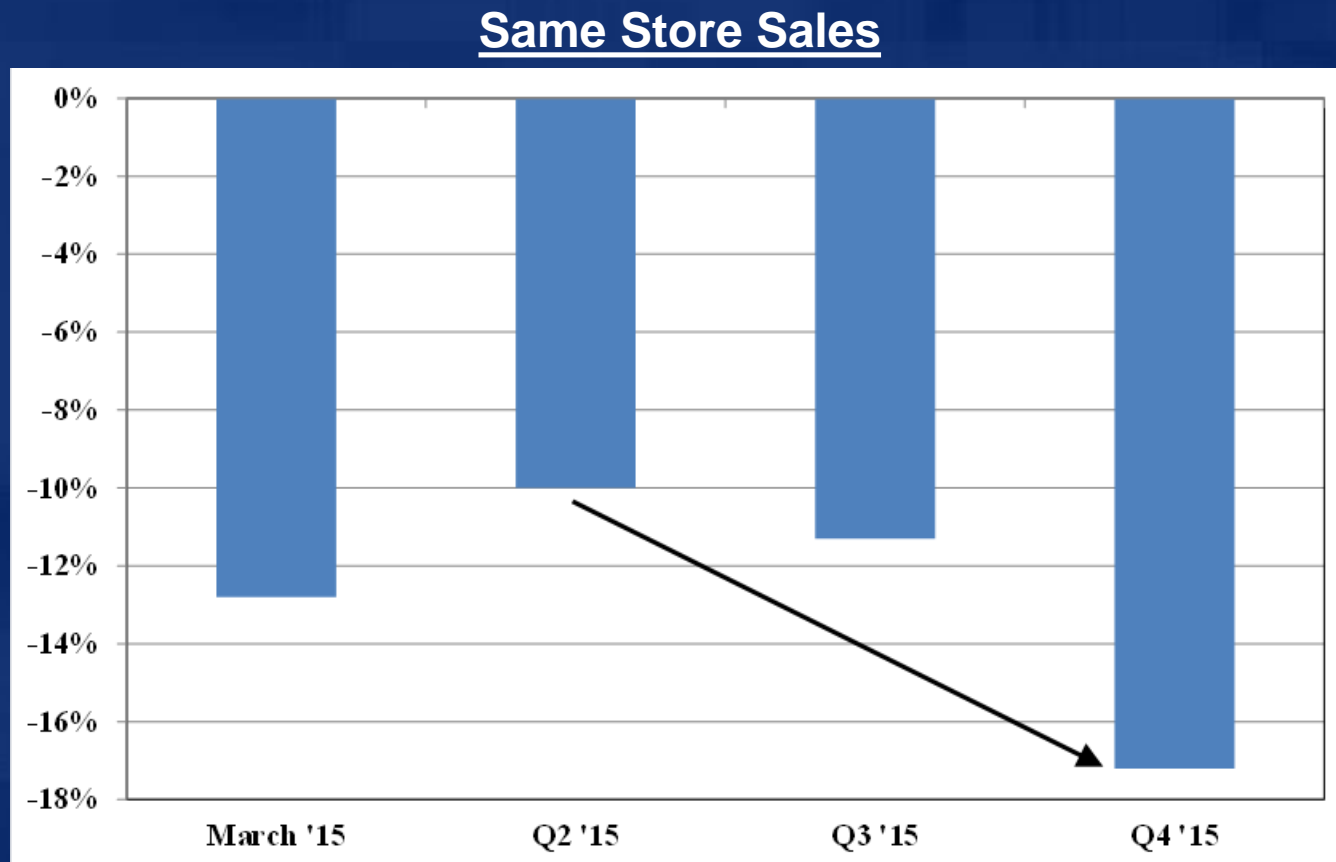




# Sales, Margins, Profits and Cash Flows Are Terrible/ Worsening – And There's No Sign of a Turnaround



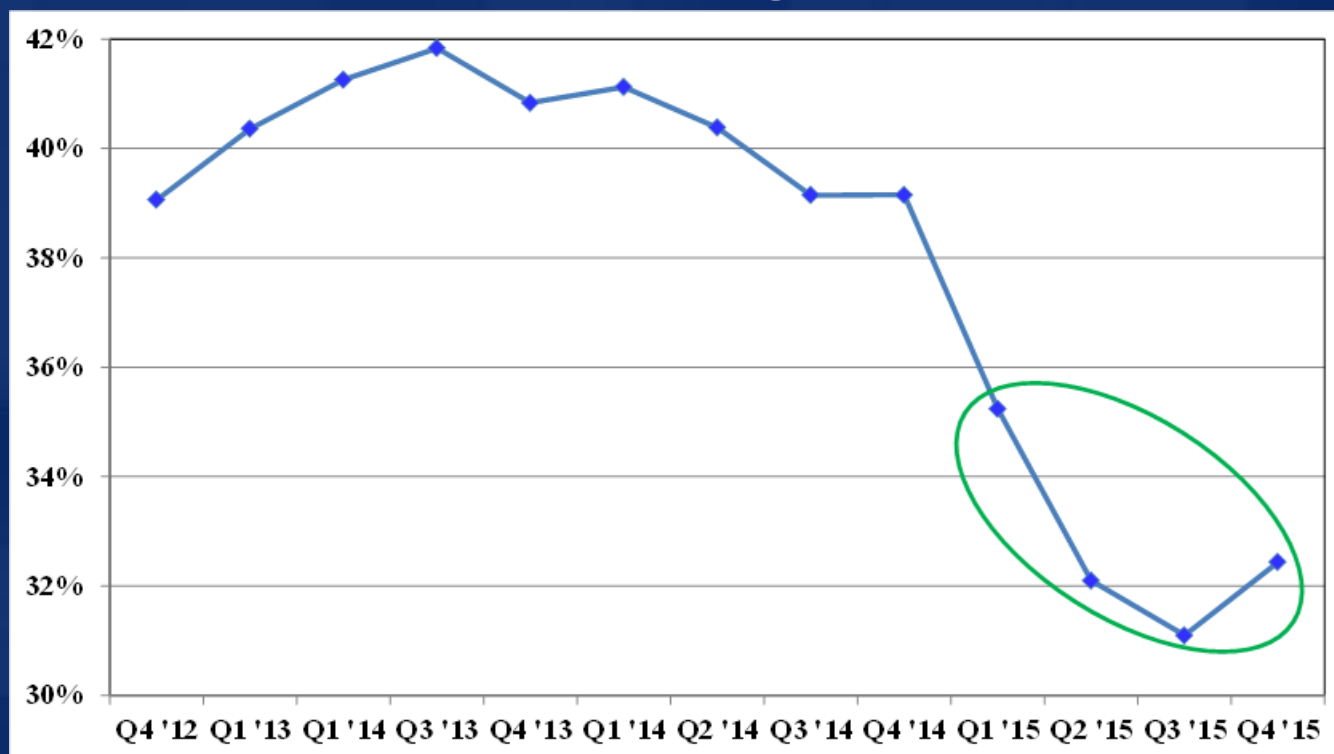
- Same-stores sales are worsening



# Gross Margin Remains Depressed

- Even after adjusting for a \$22.2 million write-down of Chinese laminate inventory in Q4, gross margin remained depressed at 32.4%, far below historical levels and what is needed to return to profitability

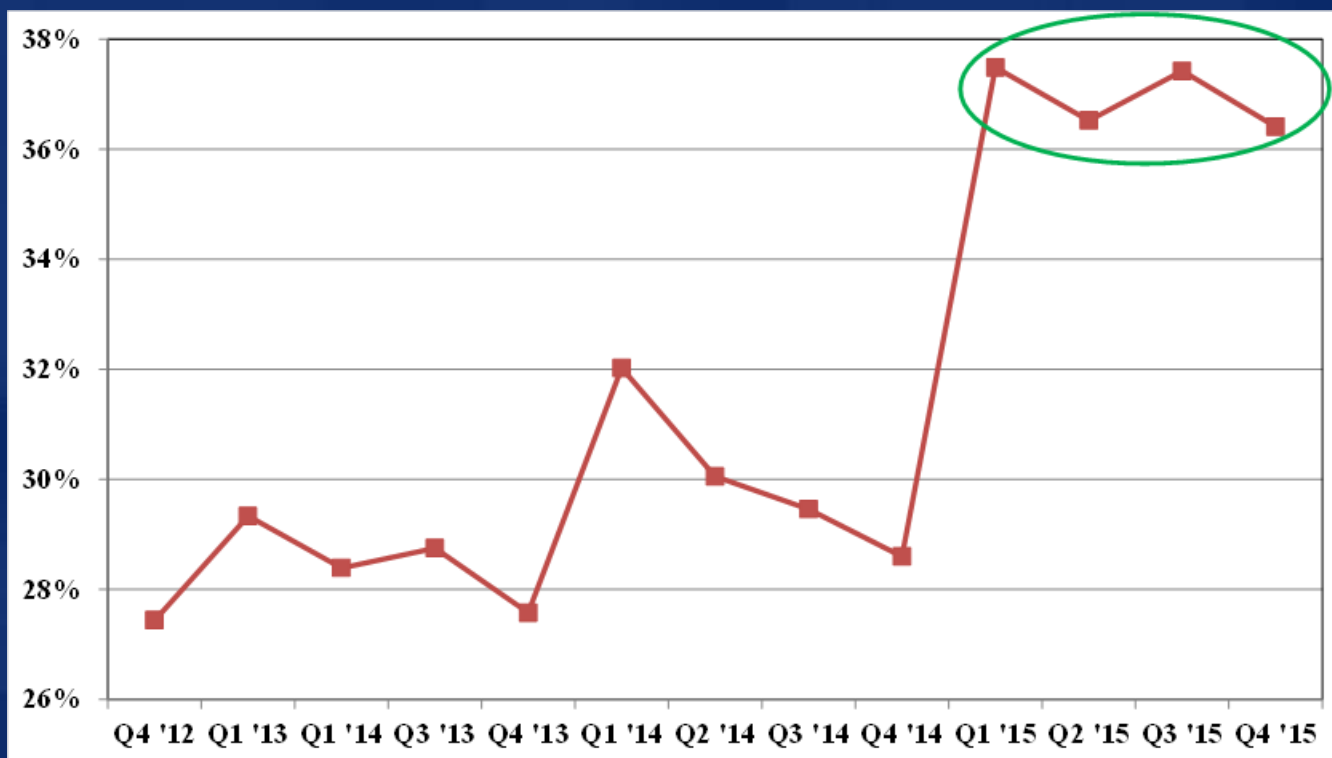
## Gross Margin



# Overhead Costs Have Soared

- Overhead (SG&A) costs as a percentage of revenue have soared due primarily to high legal and compliance expenses, which are unlikely to decline for a number of years

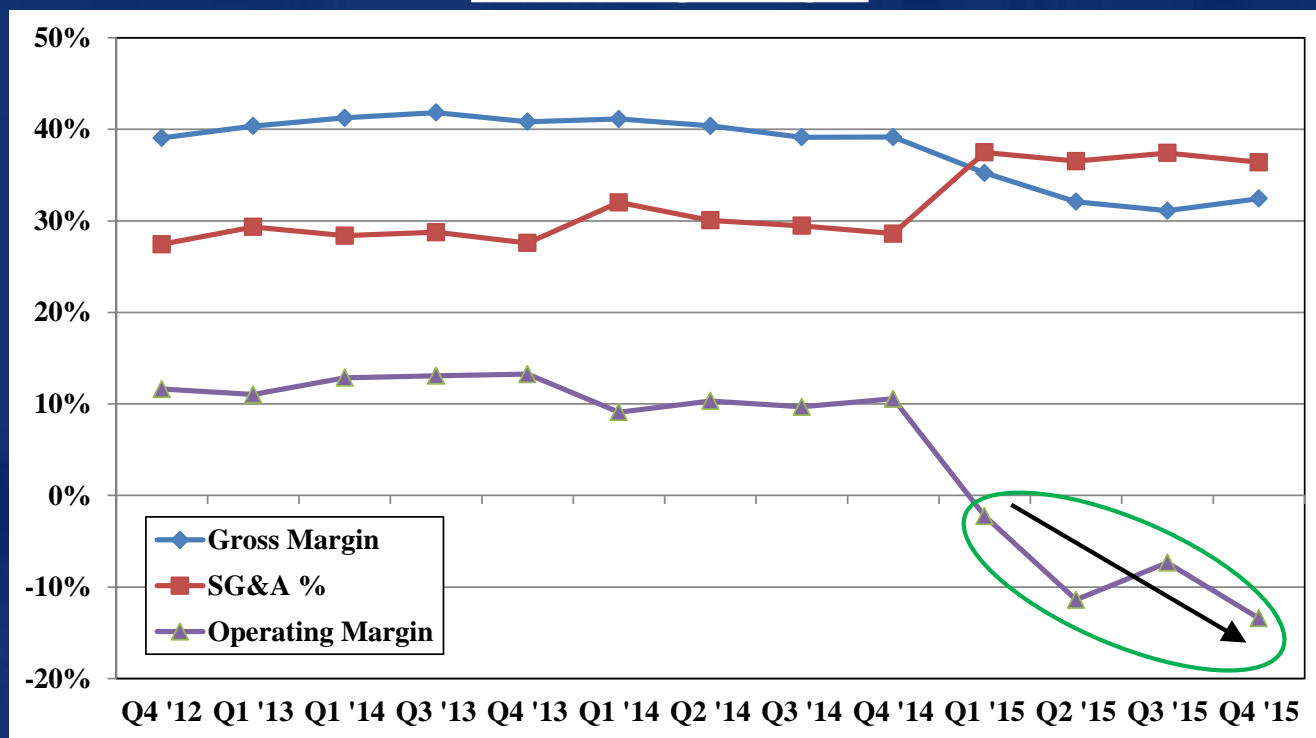
## SG&A as a Percent of Revenue



# Operating Margin Is Negative & Declining

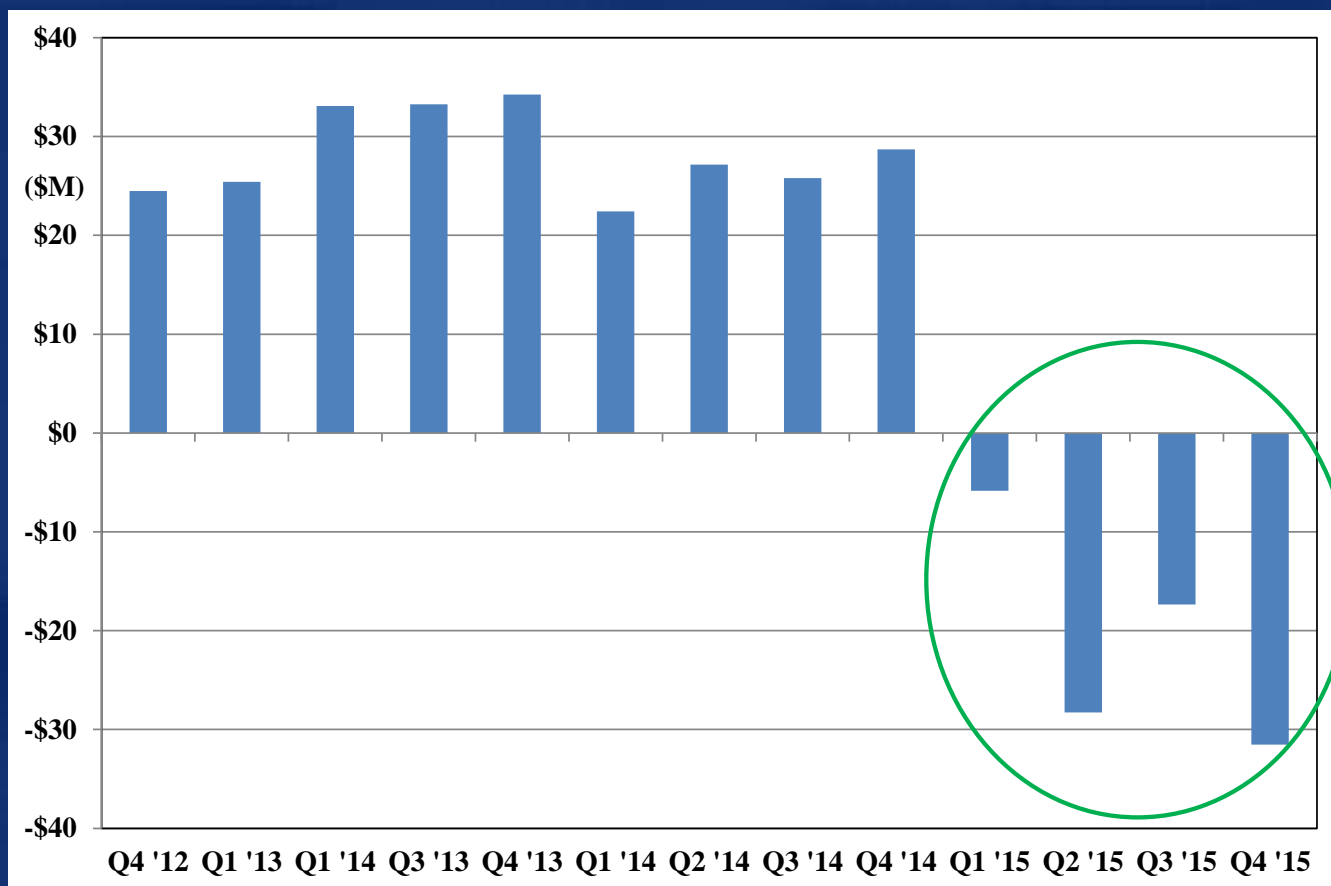
- With gross margin low and SG&A high, Lumber Liquidators' operating margin is negative – and declining

## Operating Margin



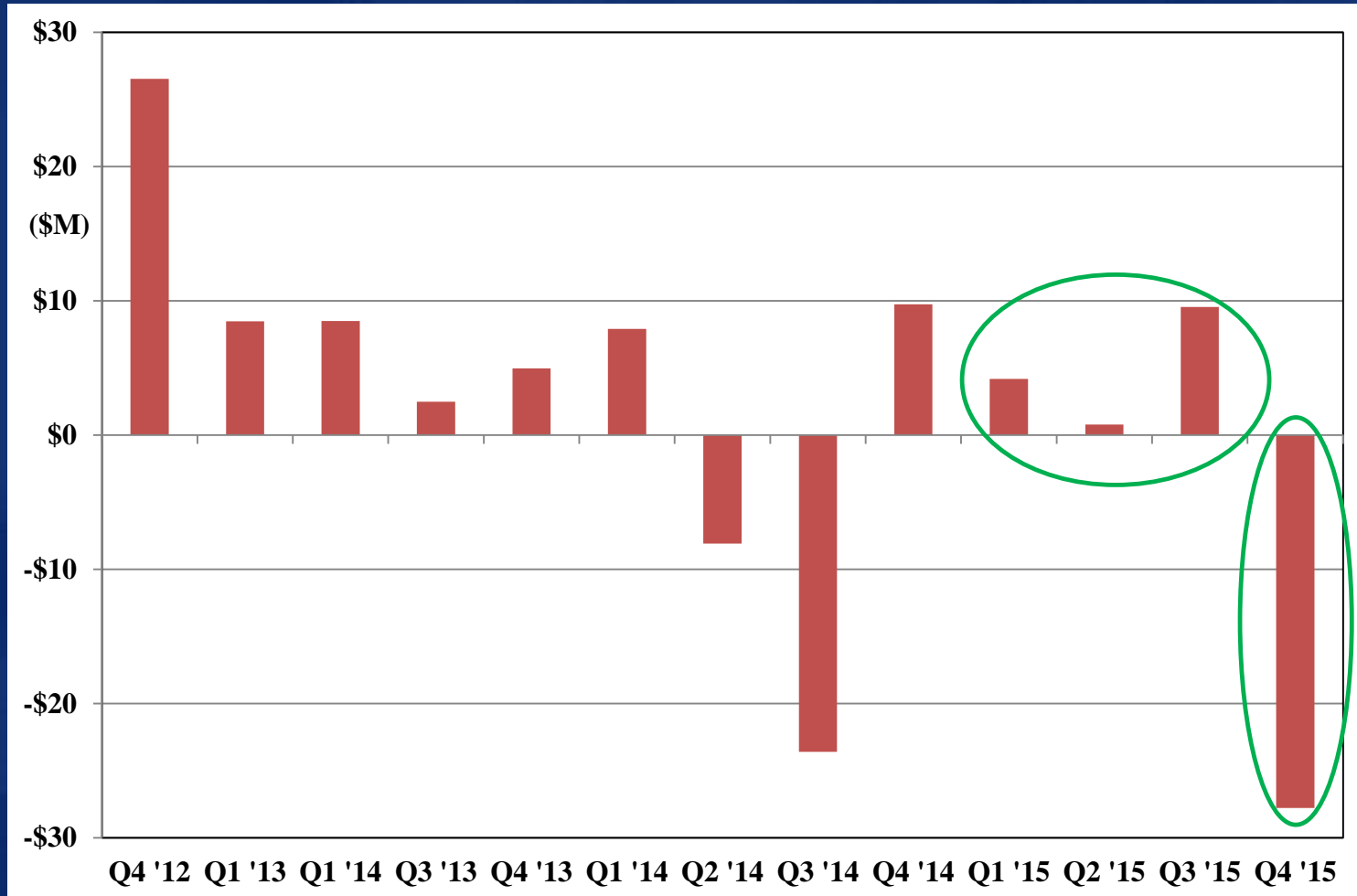
# Operating Losses Are Mounting

## Operating Income



# Despite Operating Losses, Free Cash Flow Was Positive in Q1-Q3 '15 – But Turned Sharply Negative in Q4

## Free Cash Flow

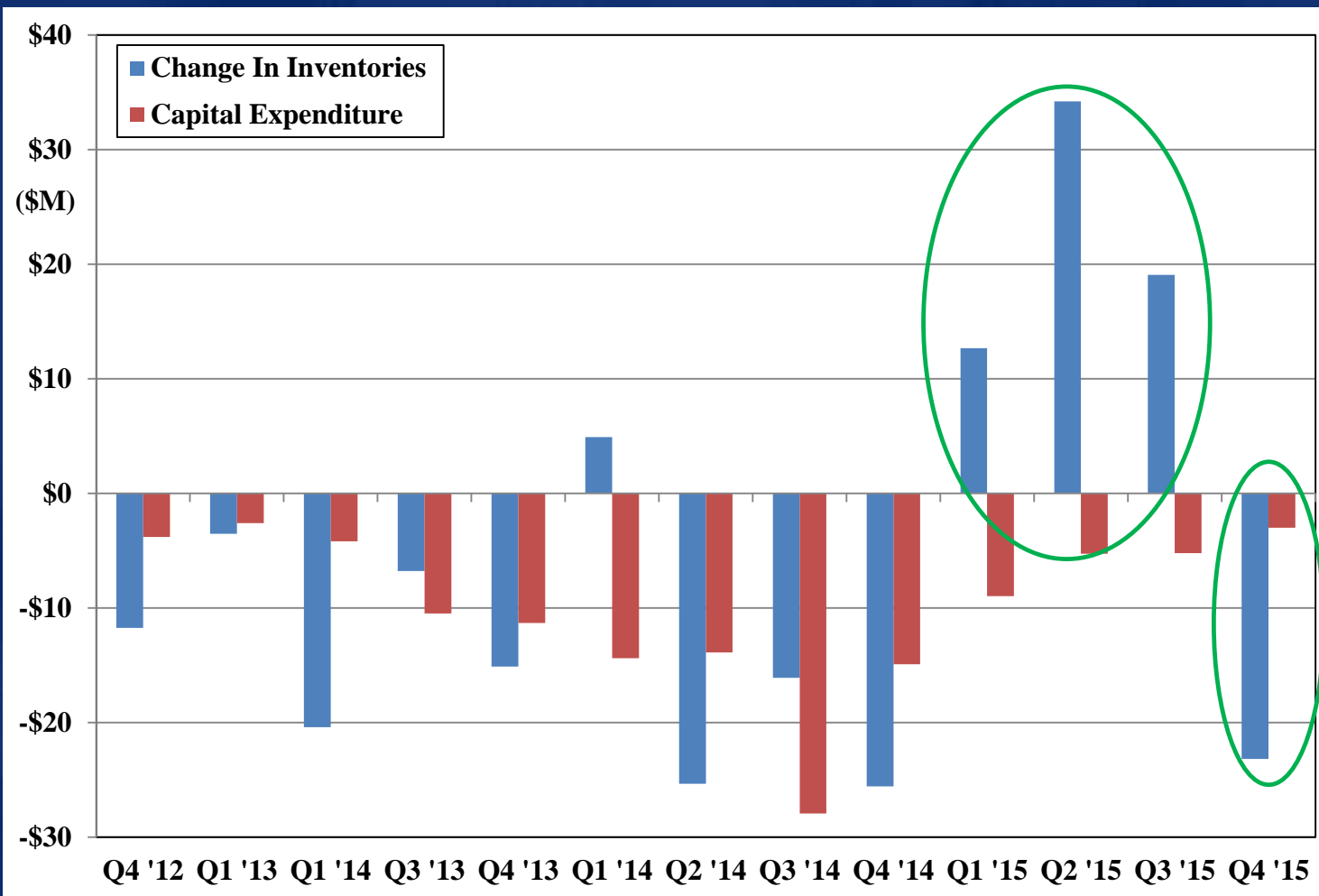




# In Q1-Q3, Free Cash Flow Was Positive Thanks Primarily to Inventory Reductions

Lumber Liquidators also slashed cap ex

## Cash Generated/Consumed by Inventories & Cap Ex



# Summary of 2015 Financial Performance

- Lumber Liquidators' operations are performing even more poorly than I thought they would when I covered this position a couple of months ago – and I can see no signs of a turnaround
- As we saw in Q4, the inventory reduction has run its course so Lumber Liquidators will no longer be able to generate free cash flow far in excess of its net income – rather, the two will track each other fairly closely going forward
- Turning to the balance sheet, as of the end of Q4 (12/31/15), the company had \$67.2 million available on its line of credit and \$6.7 million in net cash, but both are declining rapidly
  - Net cash fell sharply from \$33.8 million at the end of Q3 to \$6.7 million at the end of Q4 – and is likely negative now
    - On the Q4 conference call on 2/29/16, CFO Greg Whirley said: “During the first quarter of 2016, we borrowed an additional \$10 million against our asset-based revolving credit facility to fund additional inventory purchases in advance of the higher volume spring flooring season.”
- Thus, the onus is now on the company to turn things around because if sales and margins remain depressed, it could soon be in big trouble
- I don't lightly throw out the possibility of Lumber Liquidators going bankrupt, but simple math tells me this is not only possible but likely within a year if the company keeps posting quarterly losses in the \$30 million range

# Lack of Confidence in Company Leadership



# The Current CEO and Board Don't Appear to Be Capable of Turning LL Around



- Pretty much the entire board and the current CEO, John Presley, presided over Lumber Liquidators when, over an extended period, it purchased and imported illegally harvested hardwoods and toxic laminate, thereby bringing the company to its knees – yet these are the people who are supposed to fix the mess *they're responsible for???*
- If they had confidence in their ability to turn things around, why aren't they buying stock?
  - There hasn't been one insider purchase in the past year
- John Presley, who's been on LL's board since 2006 and was chairman of the audit committee in recent years, has no retail experience – his entire career has been in banking – and, according to two of my sources, he's not getting the job done:
  - Multiple store managers say that their sales plan (on which each manager's bonus is based) has been increased to 2014 levels, so few stores have any chance of hitting their goal. In one region, with over 20 stores, only a few hit plan in February
  - This has further demoralized store managers, who are increasingly seeking employment elsewhere
  - LL's supply chain, price articulation strategy, product selection and quality are all areas of severe neglect and concern
  - Both merchandising and operations are in need of an upgrade
- My conclusion is that the board needs to find a new CEO – and shareholders need to replace most of the board – before it's too late

# Three Prior Presentations on Lumber Liquidators – In Chronological Order



# The First Presentation





# **If It Seems Too Good to Be True...**

## **Why I'm Short Lumber Liquidators (LL)**

Whitney Tilson  
Robin Hood Investors Conference  
November 22, 2013



If you have comments on this presentation and/or information about Lumber Liquidators, please email me at [WTilson@KaseCapital.com](mailto:WTilson@KaseCapital.com).  
The latest version of this presentation is posted at: [www.tilsonfunds.com/LL.pdf](http://www.tilsonfunds.com/LL.pdf)

KASE CAPITAL

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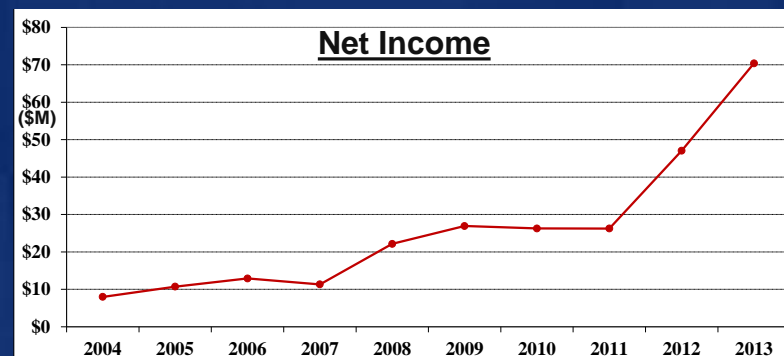
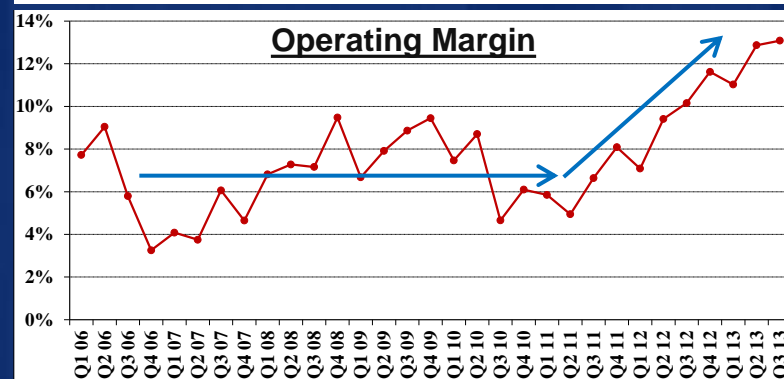
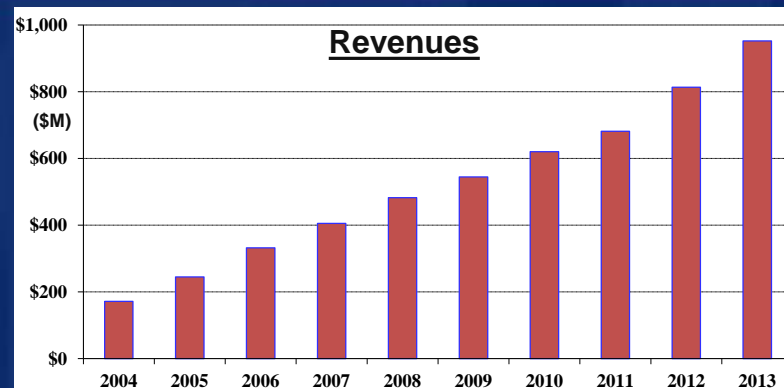
# Lumber Liquidators's Stock Has Risen More Than 7x in Less Than Two Years





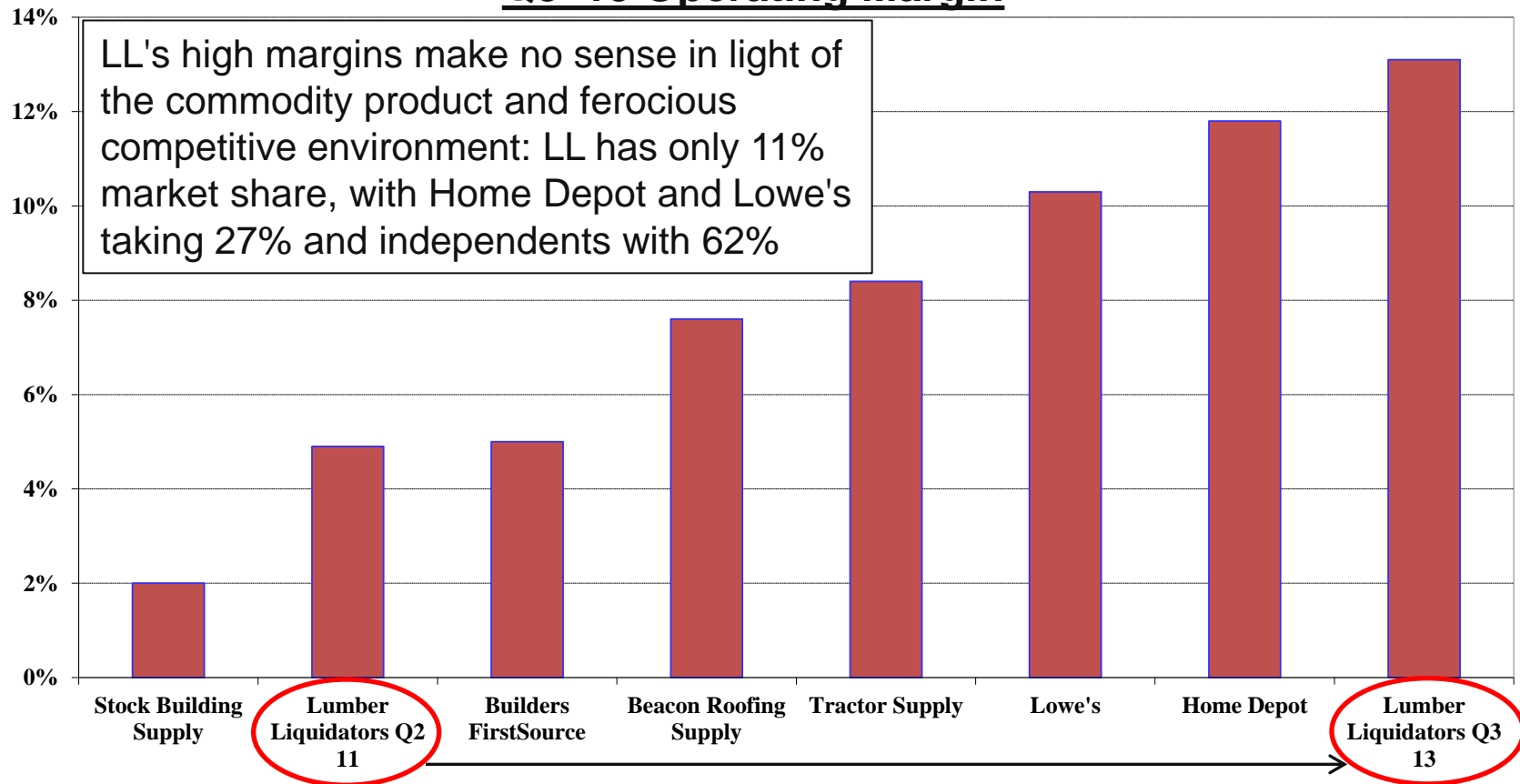
# Lumber Liquidators Has Grown Rapidly in the Past Decade, Especially in the Past Two Years

- Revenue growth of 22% annually for nearly a decade:
- In Q3 '13, revenues, SSS, and EPS grew 25%, 17%, and 58%, respectively
- In 2014, analysts project revenue growth of 17% and EPS growth of 26%
- Operating margins have increased from 4.9% to 13.1% in only nine quarters:
- Profits have skyrocketed thanks to strong revenue and operating margin growth:



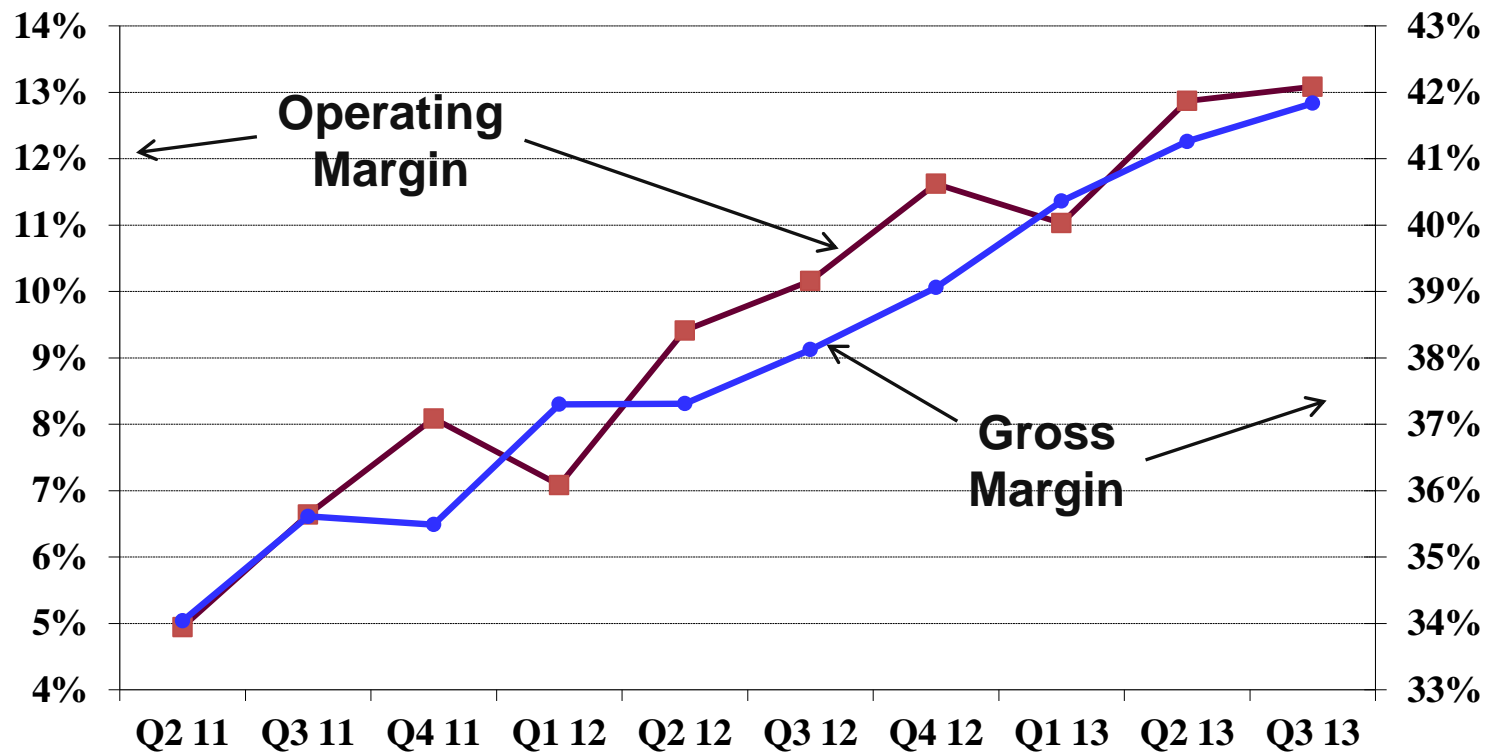
# LL's Operating Margin Has Risen to an Unusually High Level, Exceeding All of Its Peers

## Q3 '13 Operating Margin



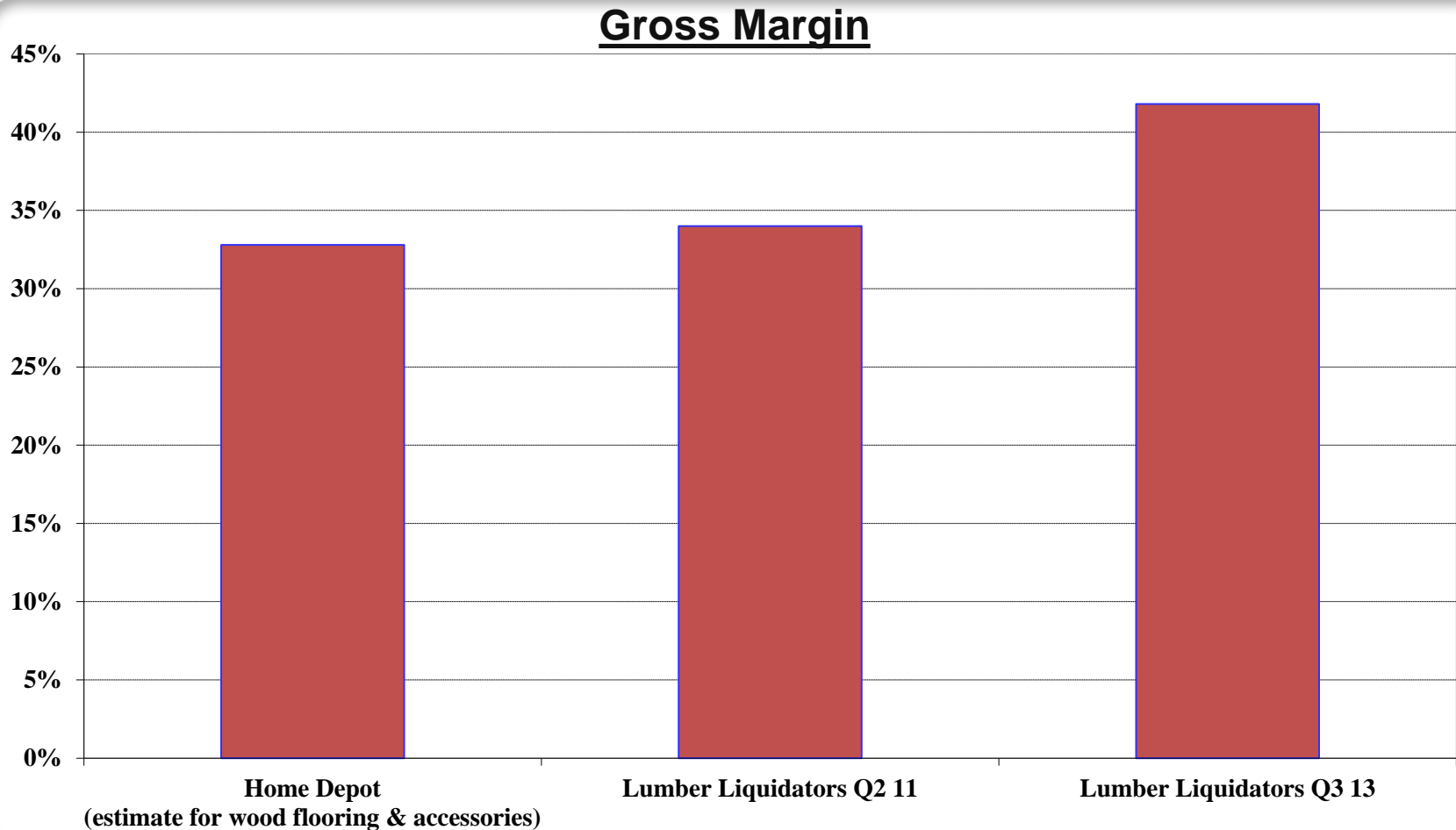
# LL's Operating Margin Expansion Has Been Driven Almost Entirely By Gross Margin Expansion

Of the 820 bps of operating margin expansion from Q2 11 to Q3 13 (4.9% to 13.1%), 780 bps of it is due to gross margins increasing from 34.0% to 41.8%





# LL's Gross Margin Two Years Ago Was Comparable to Home Depot's – But No Longer



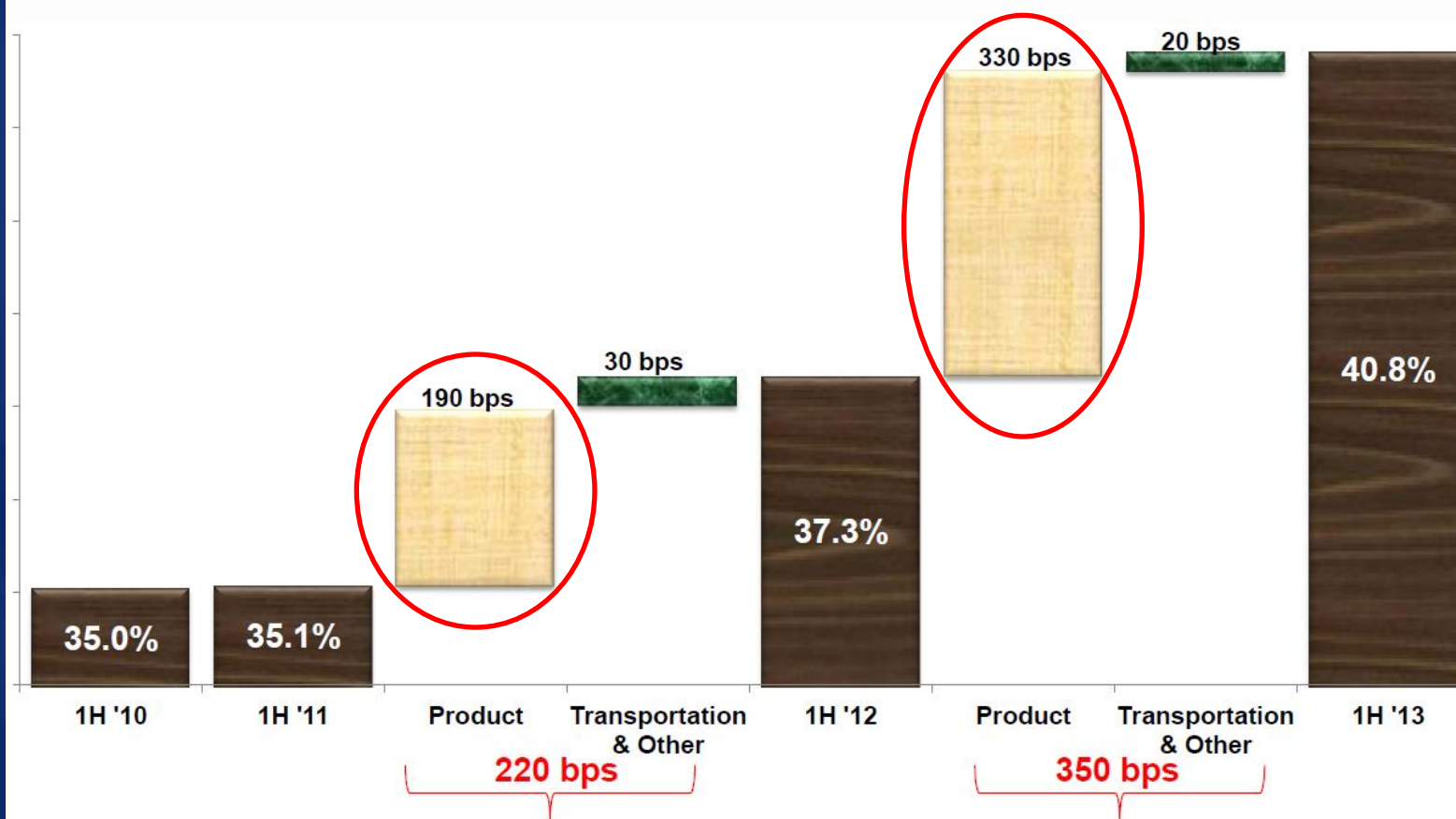
Source: Interview with Home Depot store manager, who said wood flooring and accessories had 24% and 72% gross margins, respectively. Applying LL's percentages (18.5% moldings and accessories), the comparable blended average for Home Depot is 32.8%.

# How Has Gross Margin Risen?

- On the Q3 13 conference call, LL CFO Daniel Terrell said: "Our third quarter average sale was \$1,745, up [7.1%] from \$1,630 in 2012 due to an increase in average retail price per unit sold, which benefited from a net increase in the sales mix of premium flooring products, a 180 basis point increase in the sales mix of moldings and accessories [from 16.7% to 18.5%] and stronger retail price discipline at the point of sale."
- Later, he added: "Our gross margin over the past two years has benefited from a portfolio of initiatives working individually and in combination to deliver cumulative multiyear benefit...We aggregate gross margin drivers in three primary categories, all of which contributed to third quarter expansion. The product margin drove 300 basis points due to shifts in our sales mix, including an increase in moldings and accessories, lower cost of product due to sourcing initiatives and higher like kind ASP, not due to retail price increases, but a result of greater retail price discipline at the point-of-sale." (emphasis added)
- I believe that a substantial fraction of LL's gross (and operating) margin expansion is due simply to buying the same products for less.

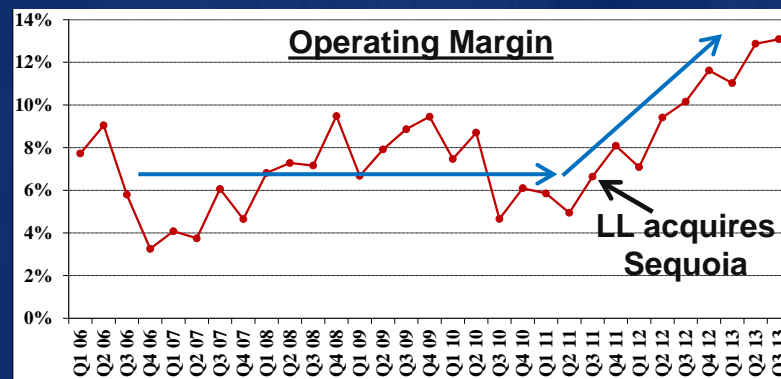
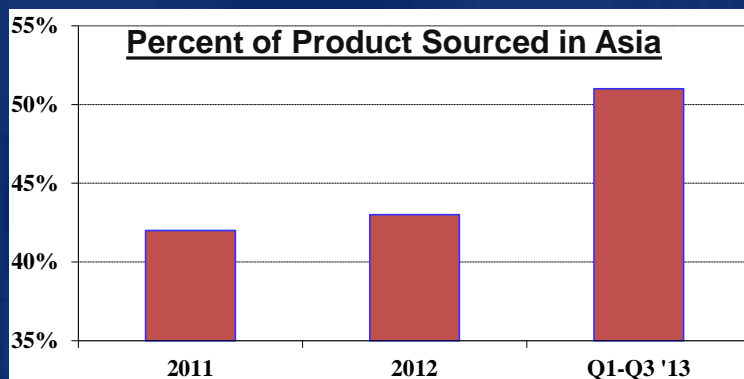
# Reduced Product Cost Accounts for Nearly All of LL's Gross Margin Expansion

## Gross Margin Expansion (Driving Operating Margin)



# Another Explanation for Why LL's Margins Have Skyrocketed

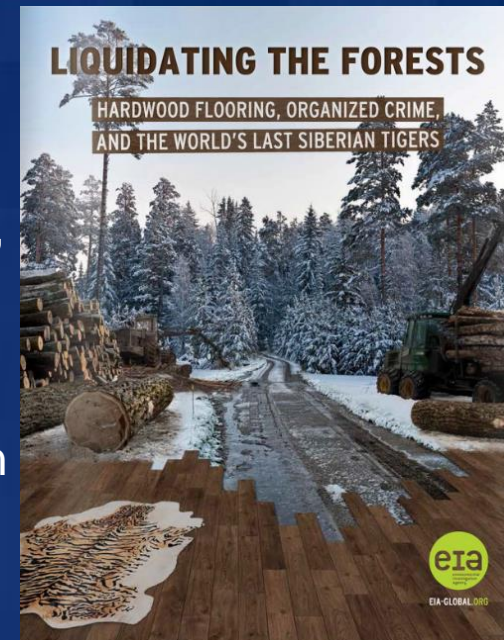
- Robert Lynch became President of LL in January 2011 and then CEO a year later. Many attribute the company's improved performance, especially margin increases, to his leadership, but I think another event two years ago also played a critical role
- In late 2011, LL paid \$8 million to acquire Sequoia, which is based in Shanghai, for its "quality control and assurance, product development, claims management and logistics operations in China. We believe our cost of product was reduced, primarily in 2012, due to both the net cost reduction of owning those services and the benefits of working directly with the mills." – LL 2012 AR
- Since this acquisition, the percentage of product sourced in Asia has risen from 42% to 51% and margins have skyrocketed:



How could a tiny \$8 million acquisition have such a big impact??? It's not like directly sourcing wood from mills in China is some great secret, unavailable to Home Depot, Lowe's and others...

# I Believe That a Meaningful Portion of LL's Margin Expansion Is Due to Buying Illegal Wood

- On October 9<sup>th</sup>, the Environmental Investigation Agency, a London-based nonprofit that conducts "undercover investigations, including audio and video recordings, to expose environmental crime", released a 64-page report, *Liquidating the Forests: Hardwood Flooring, Organized Crime, and the World's Last Siberian Tigers* (<http://eia-global.org/news-media/liquidating-the-forests>), which "details the organized crime of illegal timber harvesting in Eastern Russia, and tracks the wood across the border into China, through factories and warehouses, to its ultimate destination in showrooms around the world."
- "During a multiyear investigation by the EIA, Lumber Liquidators, the largest specialty retailer of hardwood flooring in the United States, emerged as the strongest example of a U.S. company whose indiscriminate sourcing practices link U.S. customers to the destruction of critically endangered tiger habitat and forests in the RFE [Russian Far East]. While making record profits in recent years, Lumber Liquidators has turned a blind eye as its purchases have fueled rampant illegal logging in the region."





# A <2 Minute Excerpt of EIA's 11-Minute Video



Source: EIA (posted at: [www.youtube.com/watch?v=UKqwMH2N0vc](http://www.youtube.com/watch?v=UKqwMH2N0vc) or simply Google "EIA Lumber Liquidators video")



# Is the EIA Report Correct – And If So, So What?



- The EIA report is meticulously researched and documented – it's an extremely impressive piece of investigative work
- The story is consistent with everything we know about Russia and China: the Wild West of capitalism, widespread corruption, little rule of law or concern for environmental issues, etc.
- Both EIA's evidence and common sense indicate that the EIA report is directionally correct – but the devil is in the details: how widespread is the illegal logging in Russia, how many mills in China are trafficking in illegal wood, and how compromised is LL's supply chain?
- My best guess is that this is a big problem, not a small one
- But even if I'm right, so what? Lots of companies are doing lots of even more nefarious things and regulators/authorities do nothing
- What's the catalyst?

# Federal Authorities Raided LL's Headquarters Two Months Ago



- On September 26<sup>th</sup>, agents from the Department of Homeland Security's Immigration and Customs Enforcement and the U.S. Fish and Wildlife Service raided LL's headquarters, executing sealed search warrants "which relate to the importation of certain of the Company's wood flooring products"
- LL hasn't revealed any further information other than to say: "We are continuing to cooperate fully with the authorities to provide them with the requested information and there is no update or additional information pertaining to the request that we can provide at this time." (Q3 '13 conference call, 10/23/13)
- Normally a stock falls sharply and stays depressed with news like this – but in this environment (and in light of LL's blowout Q3 earnings), the stock is near its all-time high

# The Lacey Act



- The Lacey Act of 1900 prohibits trade in wildlife, fish, and plants that have been illegally taken, transported or sold
- It was amended in 2008 to include anti-illegal-logging provisions
- It carries criminal penalties of up to \$500,000 per violation
- The most relevant prior use was against Gibson Guitar, which the United States Fish and Wildlife Service raided in 2009, accusing the company of illegally importing hardwoods from Madagascar
- The case was settled on August 6, 2012, with Gibson admitting to violating the Lacey Act and agreeing to pay a fine of \$300,000 in addition to a \$50,000 community payment

# How I Think It Will Play Out



- I do not think federal authorities are likely to impose a meaningful fine
- I think LL will successfully claim that it didn't know it was buying illegal wood (unless company executives were very indiscrete in their emails and documents)
- Like Gibson Guitar (see appendix), LL will probably pay a small fine a year or two from now
- BUT – this is key – LL will have to ensure that it is no longer buying illegal wood
- While the largest mill supplying LL only accounts for 4% of LL's hardwood purchases, I think it is likely that a meaningful percentage of the 51% of LL's wood sourced in Asia is from Chinese mills that are trafficking in illegal wood
- Thus, the raid by federal authorities – even before any resolution is announced – is likely to disrupt LL's supply chain and materially impact margins

# Lumber Liquidators's Stock Is Priced for Perfection

- Stock price (11/21/13 close): \$115.36
- Market cap: \$3.2 billion
- Cash: \$84 million
- Debt: \$0
- Enterprise value: \$3.1 billion
- TTM EPS: \$2.53
- 2014 est. EPS: \$3.47
- P/E (trailing): 46x
- P/E (2014 est.): 33x
- EV/EBITDA (trailing): 24x
- TTM revenues: \$954 million
- P/S (trailing): 3.4x

Any disruption to Lumber Liquidators's supply chain and/or margins could result in the stock being cut in half.

# My Two-Year Price Target Is \$53



- Sales in 2015: \$1.35 billion (16% annual increase in 2014 and 2015)
- Operating margin: 9% (give back half of the 830 basis point increase in the last nine quarters and go to 9%, still far above LL's long-term average)
- Tax rate: 39%
- Diluted shares outstanding: 28 million
- Equals EPS of \$2.65
- P/E multiple of 20 (generous if earnings are flat for two years and margins contract)
- Equals share price of \$53



# Summary: There Are Many Ways to Win



- The valuation is very high – far above historical and peer averages
- Operating margin is at an all-time high, roughly double the historical average
- The raid by federal authorities could impact the company in many ways:
  - LL might have to change many of its suppliers, which could raise product costs and disrupt its supply chain
  - It could suck up significant time and attention of management
  - Legal/compliance costs might be large, both up front and ongoing
  - LL might get hit with a big financial penalty and/or other actions such as charges against management
- The EIA report might get picked up by the media and/or social networking, which could impact sales and put additional pressure on the company
- LL may have a formaldehyde problem, which could gain traction thanks to a class action lawsuit that was just filed
- A major new direct competitor, Floor & Decor, has emerged and is growing rapidly
- Customer dissatisfaction appears to be extremely high, which could impact future growth

# Appendix



# What LL Says About Its Sourcing



## CEO Robert Lynch, Q3 '13 conference call, 10/23/13

"I can assure you of our commitment to uncompromising integrity and ethical business conduct across all areas of Lumber Liquidators' operations. We expect and require the same with our suppliers. Working together, we strive to advance responsible forest management. The nature of our supplier relationships within our direct sourcing model allows us to develop and produce the highest quality merchandise in the broadest assortment at industry-leading value. We believe these direct relationships are unique in our industry and provide us with a competitive advantage.

We work collaboratively with our suppliers, from planning to payment, and expect them to stand by their promises and commitments as we do. We are sought after by mills all over the world and we have a supplier due diligence process designed to identify long-term relationships that can provide sustainable and growing supplies of our product. Many mills are disqualified during this on-boarding process. Once we establish a mill relationship, we monitor and enforce our specifications and practices through more than 60 employees dedicated to quality control and assurance located on the ground in the U.S., Canada, China and South America.

We invest significant time and resources to safeguard quality and enforce product compliance and we terminate relationships with suppliers we believe are not adherent to those standards. As a result of these processes, we diversify our sourcing across more than 100 suppliers, this affords us flexibility in making changes to meet consumer trends or if we find that the supplier is not willing to comply with our policies.

It is important to note that no single mill provides more than 4% of our hardwood purchases and no single hardwood product represents more than 1% of our sales mix."

However, in a document entitled LUMBER LIQUIDATORS' COMPLIANCE WITH CALIFORNIA TRANSPARENCY IN SUPPLY CHAINS ACT, Lumber Liquidators reveals that: "We do not at this time engage third party auditors or verifiers to evaluate supplier compliance with our standards." (emphasis added)

# LL's Response to My Presentation



LL stock fell 12% the day of my presentation, which led the company to release this statement:

"Mr. Tilson did not contact the company in compiling his presentation and we have never met with him to discuss our business. Mr. Tilson's presentation is based entirely on his own speculation and the contents of a report released almost two months ago which we had previously stated contained numerous inaccuracies and unsubstantiated claims. Lumber Liquidators is committed to uncompromising integrity in how the Company operates, across all areas of the business. We have policies and procedures in place for the sourcing, harvesting and manufacturing of all of our products, monitored by professionals located around the world. We support the protection of the environment and responsible forest management, and we invest significant time and resources to safeguard quality control and compliance. As a result of our processes, we diversify our sourcing across more than 100 suppliers, which affords us the flexibility to make changes to meet consumer trends and move business away from any supplier unwilling to comply with our policies. If we find that any of the Company's suppliers are not adhering to our standards, we will discontinue sourcing from those suppliers. It is important to note that no single mill provides more than 4% of our hardwood purchases and no single hardwood product represents more than 1% of our sales mix."

# My Response to LL (1)

Lumber Liquidators asserts that the EIA report “contained numerous inaccuracies and unsubstantiated claims”, but has yet to provide even one fact to rebut the report, which I found to be an extremely impressive piece of investigative work – and 100% consistent with everything we know about the wild-west business environment in Russia and China: widespread corruption, weak rule of law, little concern for the environment, etc.

Federal authorities obviously think the EIA report is credible, as agents from the Department of Homeland Security's Immigration and Customs Enforcement and the U.S. Fish and Wildlife Service on September 26<sup>th</sup> raided LL’s headquarters, executing sealed search warrants "which relate to the importation of certain of the Company's wood flooring products."

Lumber Liquidators’s only response has been to say (on the Q3 earnings conference call), "We are continuing to cooperate fully with the authorities to provide them with the requested information and there is no update or additional information pertaining to the request that we can provide at this time." The company’s silence speaks volumes.

Lumber Liquidators’s second line of defense appears to be that even if the EIA report is correct, it focuses on only one supplier, which the company can simply stop sourcing from with minimal disruption since “no single mill provides more than 4% of our hardwood purchases and no single hardwood product represents more than 1% of our sales mix.”

I’m skeptical that this is an isolated problem limited to one rogue supplier. Rather, the combination of a) the evidence in the EIA report, b) the unusually rapid increase in Lumber Liquidators’s margins to unprecedented levels immediately after acquiring a Chinese supply chain company, and c) the hugely corrupt business environment in both Russia and China lead me to believe that Lumber Liquidators has a big problem on its hands. Though I can’t prove it, the evidence I see, combined with common sense, makes me think it’s highly likely that what EIA has uncovered is a pervasive problem across Lumber Liquidators’s Chinese supply chain.



# My Response to LL (2)

## My response (continued):

Since the raid, I assume that the company is scrambling to show the authorities that whatever problems are in their supply chain are isolated cases, they didn't know about it, etc. But keep in mind that the authorities raided Lumber Liquidators based on the EIA report, so they're not going to be easily fooled by some spin and token actions. Rather, I think Lumber Liquidators right now has no choice but to very quickly clean up its act to avoid major sanctions by the authorities.

Specifically, I think Lumber Liquidators will have to: 1) immediately stop sourcing from suppliers they even suspect are trafficking in illegal wood; 2) find replacement suppliers; and 3) ensure their entire worldwide supply chain is pristine. Doing all of these things is likely to be very costly and disruptive to the business – not to mention management being distracted by having to deal with the authorities for the foreseeable future.

These things might not matter if the stock were cheap, but it's not: after a 7x run-up in less than two years, it trades at 40x trailing earnings and 22x trailing EBITDA.

My two-year price target is \$53 (and I think I'm being generous) based on the following back-of-the-envelope math:

Sales grow 16% annually in the next two years, as analysts expect (resulting in revenue of \$1.35 billion)

Operating margins give back half of the 830 basis point increase in the last nine quarters and fall to 9% (still far above the long-term average)

The market responds to this by assigning the stock a 20x P/E multiple

Result:  $\$1.35\text{B} \times 9\% - 39\% \text{ tax rate} / 28\text{M shares} = \$2.65 \text{ EPS} \times 20 = \$53$



# My Analysis of Lumber Liquidators'

## Updated Guidance



- On December 9<sup>th</sup>, Lumber Liquidators updated its guidance for Q4 and 2014 and released a new investor presentation. I believe this new information provides evidence to support the key pillar of my investment thesis: that margins will come under pressure, leading Lumber Liquidators to miss the exuberant expectations built into the stock price.
- On December 10<sup>th</sup>, I posted an article on Seeking Alpha entitled *My Analysis of Lumber Liquidators' Updated Guidance*:  
<http://seekingalpha.com/article/1887441-my-analysis-of-lumber-liquidators-updated-guidance>

## David Peligal, Analyst, Grant's Interest Rate Observer

"The bullish Lumber Liquidators' story revolves around the potential opportunity for the company to open 600 stores in the United States over the next couple of years and to take market share from independent floor-covering retailers...

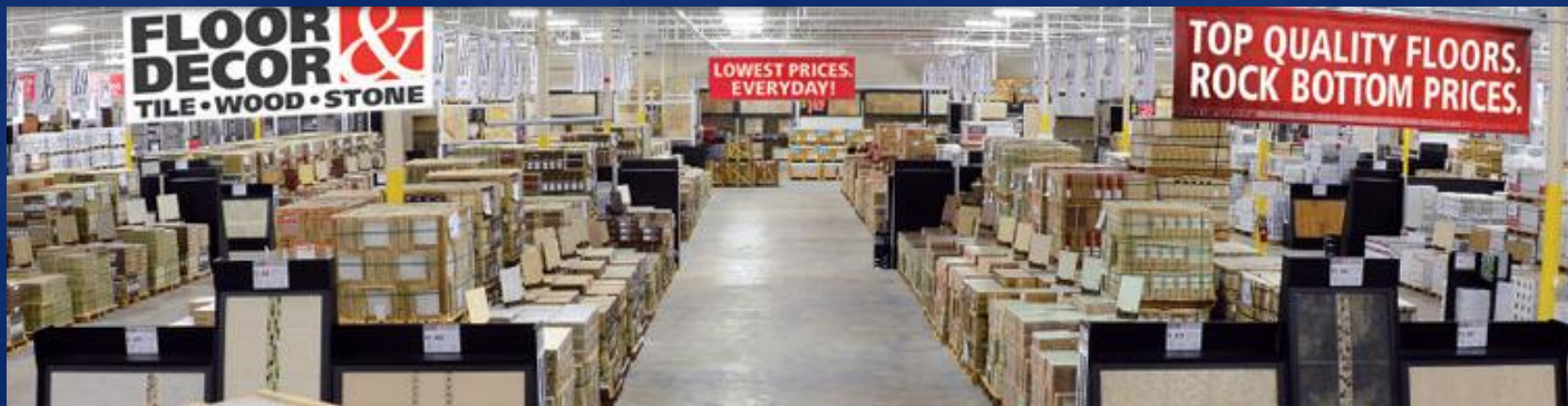
Now it's true that new stores cannibalize old stores, but let's make the generous assumption that a mature LL store can generate \$3.5 million of revenues per year. Furthermore, assume LL can open a total of 600 stores, and that total revenue at some point in the future will be \$2.1 billion (600 stores times \$3.5 million per store). Say, in addition, that LL can take share from independent retailers and that operating margin climbs to 14%. You would then have \$294 million in earnings before interest and taxes (\$2.1 billion in future revenues times a 14% margin).

Because, at this indeterminate point in the future, LL will have become a mature retail concept, apply a multiple of 14. You get about \$2.6 billion of value, or perhaps \$2.4 billion, as the stores don't just build themselves."

# A Major New Direct Competitor Is Emerging – and Growing Rapidly



- Floor & Decor “is a leading specialty retailer in the hard surface flooring market, offering the broadest selection of ceramic, stone, tile, wood, and laminate flooring available in the industry. Floor & Decor sources directly from manufacturers around the globe to bring the world’s best and most innovative flooring to our customers at the lowest price in the marketplace.”
- It is growing rapidly and “currently operates 37 stores in 18 metropolitan markets across the country. Stores typically range in size from 60,000 to 80,000 square feet, and each store stocks approximately 2,500 products.”



# A Formaldehyde Problem?

- A short seller bought three samples of flooring LL imported from China, had them tested for formaldehyde, and discovered that one was tainted with dangerous levels of formaldehyde:
  - "I recently conducted independent lab testing -- engaging Berkeley Analytical, an IAS accredited testing laboratory -- on a sample of Lumber Liquidators house brand flooring ("Mayflower" brand), and the results that came back weren't pretty: Over 3.5x the maximum legal level for formaldehyde. (This product was purchased retail from a Southern California retail store.) Fully understanding the importance of this finding, we submitted samples from the same package to a second laboratory, this one the "gold standard" lab for the National Wood Flooring Association, NTA. This second lab confirms the product is in violation of the legal limit for formaldehyde."
- By itself, this proves nothing – but tainted products from China are so common that I wouldn't be surprised if this turns out to be a big problem for LL
- For more, see two articles by Xuhua Zhou: *Illegal Products Could Spell Big Trouble At Lumber Liquidators* (<http://seekingalpha.com/article/1513142-illegal-products-could-spell-big-trouble-at-lumber-liquidators>) (6/20/13) and *Lumber Liquidators - Management's Silence And Broker's Rebuttal May Validate The Worst Fear*, (<http://seekingalpha.com/article/1517322-lumber-liquidators-managements-silence-and-brokers-rebuttal-may-validate-the-worst-fear>) (6/24/13)



# A Formaldehyde Scare in China



- "A&W, Anxin Weiguang Flooring, was a leading hardwood flooring company in China until February of 2012 when a consumer advocate broke the news on the Internet that A&W branded engineered hardwood flooring products do not meet regulatory formaldehyde emission standards. For investors who are unfamiliar with formaldehyde, it is listed as a known carcinogen in June of 2011 by the National Toxicology Program. In addition to being a known human carcinogen, formaldehyde is also shown to cause childhood asthma and female reproductive issues. A&W is a major Chinese flooring company counting Carlyle as one of its investors. Media nicknamed the issue "toxic flooring gate" and drew an incredible amount of attention from consumers. Among the allegations, the advocate detailed A&W branded engineered hardwood flooring products used in certain condominiums developments significantly exceed the regulatory limits and such flooring products were sourced directly from A&W. The issue turned into a major controversy forcing China Vanke, the largest residential real estate developer in China, to re-test all the flooring products sourced from A&W. After comprehensive testing of the flooring products in question, Vanke identified at least one of its developments where the formaldehyde emission level of the flooring products was noncompliant. The incident caused significant public concerns and subsequently, A&W experienced a drastic sales slump and almost went bankrupt as a result of the incident."

# Visits to Five Chinese Suppliers to LL Reveal Very Poor Working Conditions

- Workers at all but one supplier reported that they weren't paid extra for overtime and that they didn't receive social insurance, both of which are required by Chinese law
- The work environments in some cases resembled sweatshops, with strong odors, dusty air and poor lighting
- Sample pictures:





# LL's Customers Give the Company Terrible Reviews on Major Ratings Web Sites



- About.com gives LL a 1.3 rating (out of 5; 44 reviews)
- Resellerratings.com gives LL a 0.17 rating (out of 10; 96 reviews)
- Consumeraffairs.com gives LL a 1.2 rating (out of 5; 78 reviews)
- Mythreecents.com gives LL a 1.1 rating (out of 5; 75 reviews)
- Pissedconsumer.com had 75 complains for LL, 10x the number of Home Depot per dollar of revenues
- The only site I could find with good reviews for LL was Google (4.5 of 5 stars), but as Xuhua Zhou notes:
  - "The Google reviews are notoriously known to be subject to easy manipulation. The issue got so severe that Google itself had to issue a warning to SEO and businesses to avoid [fake reviews](#). In the case of Lumber Liquidators, the reviews on [Google Shopping](#) are especially suspicious. Investors should take time to scroll down a number of pages and actually read the reviews. Most of the reviews came from Online Shopper (I do not think many consumers who purchase LL products do so exclusively online). And almost 96% of the reviews or 3168 of them came from a single source, Bizrate."

# Both LL's Founder/Chairman and CEO Have Been Heavy Sellers of the Stock This Year



## Founder/Chairman Tom Sullivan

May 2013: Sold 200,000 shares for \$16.5 million

August 2013: Sold 100,000 shares for \$10.2 million

Total sales: \$26.7 million

Remaining holdings: 609,000 shares

## CEO Robert Lynch

May 2013: Exercised and sold 80,000 shares for net proceeds of \$5.0 million

May 2013: Sold an additional 24,500 shares for \$2.1 million

July 2013: Exercised and sold 50,000 shares for net proceeds of \$3.5 million

Total sales: \$10.6 million (total cash compensation in 2012: \$1.2 million)

Remaining holdings: 34,216 shares

- Lynch appears to have sold every share he can (his remaining holdings haven't vested yet)

# The Second Presentation



# Why I'm Short Lumber Liquidators (LL)

Whitney Tilson  
Robin Hood Investors Conference  
October 21, 2014



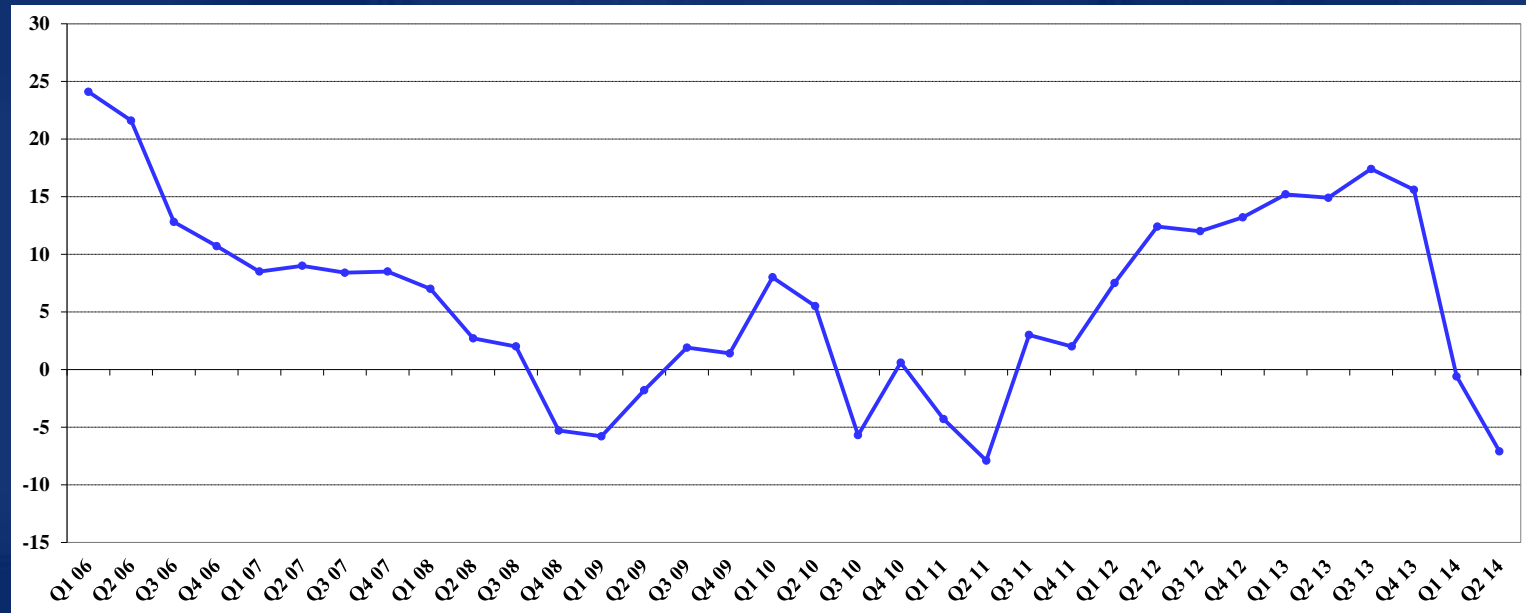
# Lumber Liquidators' Stock Has Been Cut in Half Since I Presented It at Last Year's Robin Hood Conference

Despite its decline, however, I have recently added materially to my position in Lumber Liquidators and it is now my largest short position.



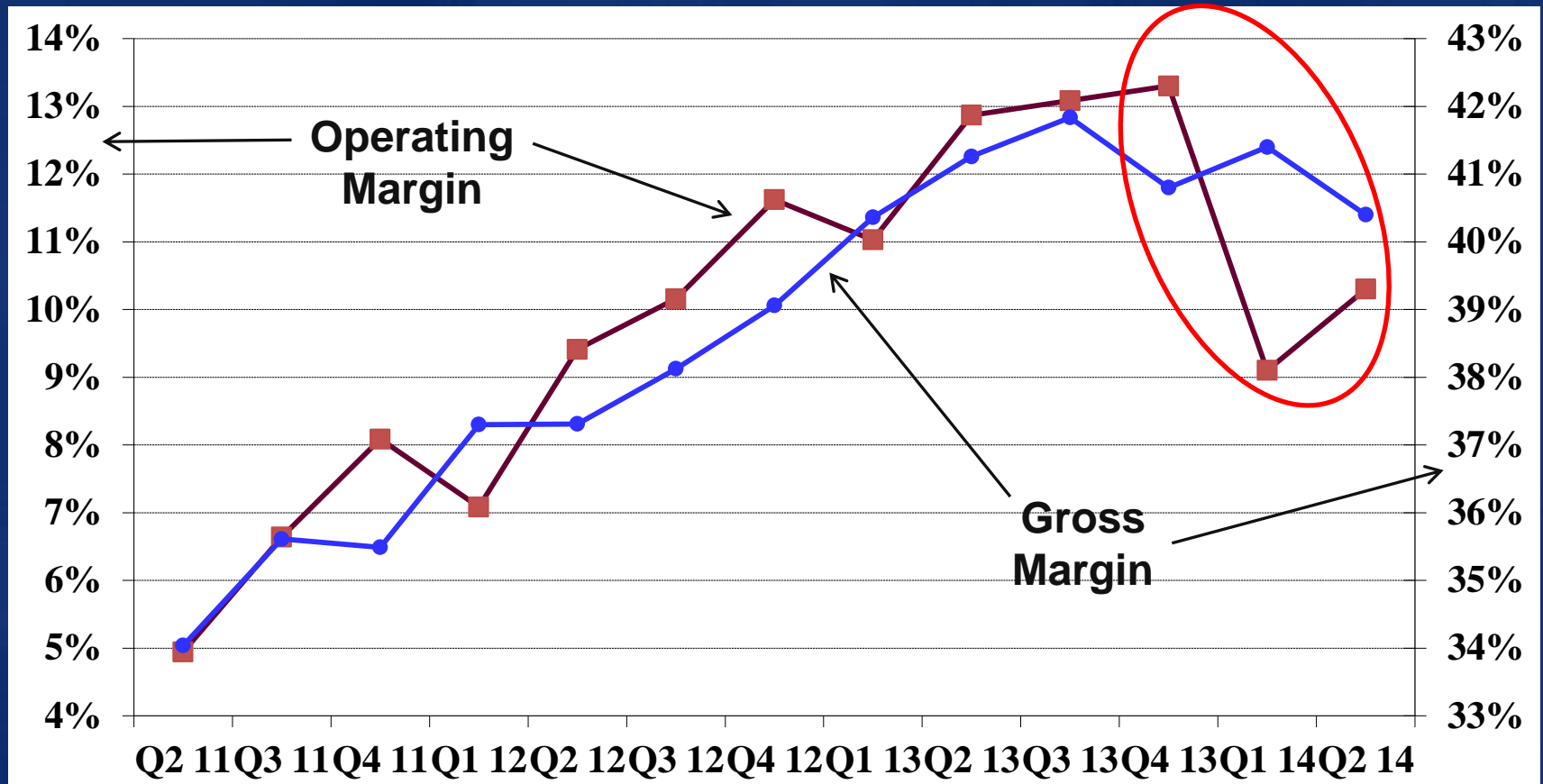
# Same Store Sales Have Plunged in the Last Two Quarters

## Same Store Sales





# After Three Years of Spectacular and Somewhat Inexplicable Increases, Margins Are Reversing



# Why I've Increased My Short Position at Current Prices



- The business fundamentals are weakening and the stock is expensive at 11.2x EV/EBITDA and 21.3x trailing earnings
- More importantly, however, I now believe that my investment thesis a year ago – that Lumber Liquidators almost certain was (any may still be) sourcing illegally harvested Siberian hardwoods from Chinese mills – is only the tip of the iceberg

I believe that Lumber Liquidators is trafficking in tainted wood to a much greater degree than just hardwoods – and I think I will soon be able to prove this, so stay tuned

# The Third Presentation



# Why I'm Short Lumber Liquidators (LL)

Whitney Tilson  
Kase Capital Management  
June 14, 2015



# Despite the Stock's Collapse, Lumber Liquidators Remains My Largest Short Position

- The stock isn't cheap: at \$21.49, it's still trading at 14.4x analysts' estimates for 2016 of \$1.49
- I see nothing but bad news emerging for the company over the short-, intermediate- and long-term horizons.
- I think regulators (most likely the California Air Resources Board and the Consumer Product Safety Commission) will announce that their tests of Lumber Liquidators' Chinese-made laminate show the same (very high) levels of formaldehyde shown by the tests 60 Minutes, myself and others commissioned.
- At that point, I expect regulators to take strong action against the company, including fines/penalties, requiring proper testing, and remediation steps.
- I think that the legal liabilities will be enormous, especially once hard evidence emerges that the company was knowingly poisoning its own customers.
  - I see the largest legal exposure in two areas: a) damages to customers who suffered adverse health effects and b) damages to investors who bought the stock at inflated prices based on information (the true source of margin and profit expansion) that management knew was false.

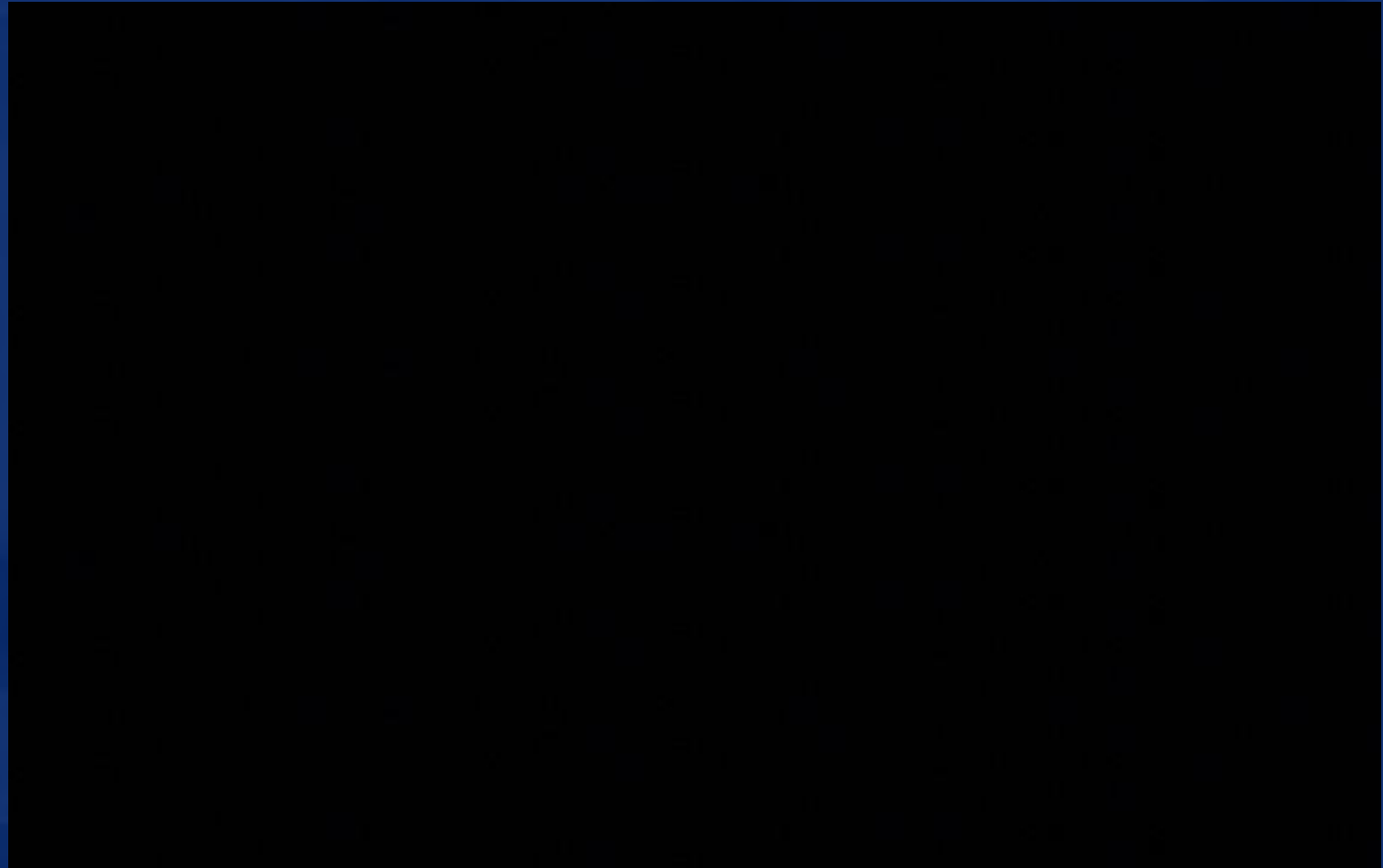
# The 60 Minutes Story Aired on March 1<sup>st</sup>



- On March 1<sup>st</sup>, 60 Minutes, the longest running, most respected investigative news program in the U.S., aired a devastating story about how Lumber Liquidators' Chinese-made laminate has dangerous levels of formaldehyde
- The most devastating part of the 60 Minutes story was hidden camera footage from the Chinese laminate mills, where employees confessed that the laminate being manufactured for LL was not CARB2 compliant



# A Four-Minute Excerpt from the 60 Minutes Segment



# Lumber Liquidators' Stock Has Collapsed Since the 60 Minutes Story Aired



# I Think It's 90%+ Likely That Senior Managers of Lumber Liquidators Knew That the Company Was Sourcing Non-CARB-Compliant Laminate

- Was Lumber Liquidators duped by its Chinese suppliers – in which case, the senior managers are guilty of nothing more than being sloppy, naïve and/or overly trusting – or did they knowingly source toxic laminate and poison their customers to save ~10% on their sourcing costs?
- If the latter proves to be the case, it would be devastating to the company in the courtroom, amongst regulators, and in the court of public opinion – so much so, in fact, that I believe the fate of the company (and the stock) will be largely determined by this issue. It would also indicate that the senior managers are truly evil and are engaging in a massive cover-up to hide their behavior.
- I think it's 90%+ likely that they knew for the nine reasons outlined on the next six pages.
- However, I cannot prove my hypothesis. To date, no damning emails, documents or whistle-blowers have emerged, nor have any Chinese suppliers ratted them out. But I'm not surprised by this – these things take time, and it's been less than three months since the 60 Minutes story aired.
- I'm confident that the truth will eventually be discovered by the many regulators, lawyers, reporters and short sellers who are carefully scrutinizing the company.

# Nine Reasons Why I Think They Knew (1)



## 1. Two anonymous tips

- "I must start by saying that you have become something of a hero here. For years, all us mom-and-pop indy flooring retailers suspected something was awry at Lumber Liquidators. You have brought this to light. THANK YOU. There is a good chance in the next week or so I will be in possession of the smoking gun you seek on proving various knowledge by Lumber's management."
- "I would put myself in the top 5 or 10 people who knew what was going on. I have some fairly damning information that they did it to save a buck, and they knew about it. I also know someone else involved."

## 2. A long-time installer for Lumber Liquidators told me that when he complained to the company about the high failure rate of their bamboo flooring, a senior executive told him it was occurring because they switched to an inferior water-based resin because the prior bamboo flooring had high levels of formaldehyde (due to a formaldehyde-based resin).

# Nine Reasons Why I Think They Knew (2)



## 3. Lumber Liquidators' behavior

- Since the 60 Minutes story broke, the company has, in my opinion, acted exactly as I'd expect a guilty company, not an honest and reputable one, which would have immediately taken the following steps:
  - Stop selling the product in question (even if it doubted the validity of the testing 60 Minutes did, why take any chances with customers' health and the company's reputation, not to mention future liabilities?).
  - Offer a full refund to any customers who wanted to return unopened product.
  - Set up a Special Committee of the board, made up of independent directors, to conduct a full investigation.
  - Hire an independent firm to do a wide range of testing, not just of Chinese-made laminate, but all of the company's products.
  - Offer to send a trained specialist with sophisticated equipment to do proper testing in customers' homes.
  - Rather than waiting for inbound calls and complaints, send a letter to every customer who had purchased the product in question in the past, say, five years, informing them that the product may be emitting dangerous levels of formaldehyde and offering a proper test.
  - For any customers with a reading above 0.016 parts per million (16 ppb), the standard set by both FEMA and NIOSH (I'm being generous – 7 ppb is the limit set by the California Office of Environmental Health Hazard Assessment), offer to pay all costs for them, if they wish, to temporarily move out of their home until the flooring can be removed and replaced with safe flooring (even if the customer chooses carpeting or wood flooring bought from another company). Also, for these customers, offer to pay all medical bills for anyone in the home suffering symptoms consistent with formaldehyde exposure.

# Nine Reasons Why I Think They Knew (3)



4. The sudden and unexpected resignation last week of CEO Robert Lynch and the departure a month ago of CFO Dan Terrell
  - People with nothing to hide tend not to suddenly quit (or get fired from) their jobs when under scrutiny.
5. Industry scuttlebutt
  - Pretty much everyone I've talked to tells me that LL is a notorious bad actor: cutting corners at every opportunity, selling very low-quality products, treating customers, vendors, installers and employees badly, and, most damningly, not being serious about compliance.
6. Knowledge of the industry, the product, and China
  - Laminate is a low-end, global commodity product in which 1% or 2% differences in pricing are meaningful. Thus, a savvy player like LL, which has been buying in China for roughly two decades, would instantly know that if they were buying 10% below the standard price for a particular type of laminate that something was wrong: perhaps it was stolen, used illegal or inferior materials, was of exceptionally low quality, or was filled with toxic chemicals.
  - This is especially true given that China is the wild west when it comes to environmental standards and rule of law.
  - *You can't hit the low bid in China and expect to get high-quality, compliant product.*



# Nine Reasons Why I Think They Knew (4)



## 7. Knowledge of the Chinese mills

- The Chinese mills openly sell non-CARB-compliant laminate – just ask them for a price quote. This isn't surprising, as they sell to customers all over the world and many countries don't have formaldehyde standards.
- It's simple: the Chinese mills will produce whatever the customer orders and package it however the customer wishes, even if it says the laminate is CARB-compliant when it's not. Heck, they'll even provide phony documentation to that effect! This is all part of the customer service package many Chinese mills are happy to provide – especially to a very big customer like Lumber Liquidators.

## 8. A lie-detection analysis

- The ex-CIA guys at Qverity, authors of Spy the Lie, did a careful analysis of what Lumber Liquidator' founder and Chairman, Tom Sullivan, did and didn't say when he was interviewed by Anderson Cooper in the 60 Minutes story, and they have posted a damning report that concludes:

QVerity's behavioral analysis of the interview concluded that Sullivan was likely aware that his company was selling flooring that was non-compliant with these regulations, and that he appeared to be withholding information, the disclosure of which could result in serious negative consequences for himself and his company.

We have drawn that conclusion on the basis of the high volume and the specific types of deceptive behaviors exhibited by Sullivan during the course of the interview.

# Nine Reasons Why I Think They Knew (5)



## 9. Ray Cotton

- No company serious about compliance would hire (and twice promote) someone like Ray Cotton to be Senior Vice President, Chief Compliance and Sustainability Officer.
- He's totally unqualified for the job: his LinkedIn profile reveals a college degree from an online, for-profit school followed by plenty of job hopping (10 jobs at seven employers from October 2000 to the present), every one of which was related to either "security" or "loss prevention".
- He appears to have no prior experience whatsoever related to his most important areas of responsibility at Lumber Liquidators: quality control, sourcing, managing suppliers in China, overseeing the testing program, etc.
- In summary, Ray Cotton is exactly the person I think a company would hire if it was knowingly sourcing tainted product and didn't want the head of compliance to know about it (though I suspect he knew).
- PS: I hear he's one of Lynch's guys, so he'll likely be following him out the door very shortly.

# Nine Reasons Why I Think They Knew (6)



## 9. More on Ray Cotton

- He doesn't appear to be a serious person, as evidenced by his personal home page and Twitter feed, which border on comical and bizarre
  - He's taken both down since I started writing about them, but I saved screenshots.
- He was tweeting from the Oscars on the morning of Wednesday, February 25th at the very moment that LL was reporting: a) terrible earnings; b) the Department of Justice might be bringing criminal charges against it for violations of the Lacey Act (for buying and importing hardwoods illegally harvested in Siberia); and c) 60 Minutes was running a negative story a few days later – all of which crushed the stock 26% that day.

### Ray Cotton's Personal Home Page

### Ray Cotton's Tweets from the Oscars, 2/24/15





# Why Did They Do It?



- Why would they do something so immoral and potentially destructive? The oldest reason in the universe: greed.
- Prior to the 60 Minutes story, Chinese-made laminate, one of the company's most profitable product lines, accounted for 14% of Lumber Liquidators' sales and this was.
- Non-CARB-compliant laminate is ~10% cheaper, so the company saved a lot of money on sourcing costs, not a few pennies, as founder, Chairman and new CEO Tom Sullivan claims.
- This was a meaningful contributor to a quick doubling of margins, which in turn helped send the stock price up eight times from \$15 to \$119 in less than two years.
- Sullivan and Lynch recognized a golden opportunity when they saw it, dumping \$37 million worth of stock at prices more than triple today's level in early- to mid- 2013 (Sullivan: \$26.7 million; Lynch: \$10.6 million).

# Formaldehyde Causes Numerous Adverse Health Effects

- The National Cancer Institute and the Centers for Disease Control and Prevention say that formaldehyde can cause "watery eyes; burning sensations in the eyes, nose, and throat; coughing; wheezing; nausea; and skin irritation," "upper respiratory tract irritation (that) can potentially exacerbate asthma symptoms and other respiratory illnesses," "chronic runny nose, chronic bronchitis, and obstructive lung disease," and is a "known human carcinogen" associated with "several cancers, including nasopharyngeal cancer and leukemia."
- This chart, in a report by the Consumer Product Safety Commission, summarizes it nicely:

Affected Areas/Systems	Potential adverse health effects
Eyes	<ul style="list-style-type: none"><li>• Stinging, burning, or itching</li><li>• Excessive tearing</li></ul>
Nose or throat	<ul style="list-style-type: none"><li>• Stinging, burning, or itching</li><li>• Sore throat</li><li>• Runny nose</li><li>• Blocked sinuses</li><li>• Sneezing</li><li>• Cancer (human and laboratory animals)</li></ul>
Respiratory	<ul style="list-style-type: none"><li>• Chest tightness</li><li>• Wheezing</li><li>• Asthma</li></ul>
Skin	<ul style="list-style-type: none"><li>• Allergic contact dermatitis<ul style="list-style-type: none"><li>◦ Skin rashes, blisters, and flaky dry skin</li></ul></li></ul>
Neurological	<ul style="list-style-type: none"><li>• Headaches</li><li>• Mood changes (i.e., depression, irritability)</li><li>• Insomnia</li><li>• Attention deficit</li><li>• Nausea</li><li>• Impairments in dexterity, memory, and equilibrium</li></ul>

# It's Easy to Find LL Customers Suffering Symptoms Consistent With Formaldehyde Exposure (1)



- I just wanted to thank you for your work on Lumber Liquidators. My wife and I put the St James Vintners Reserve (a Chinese-made laminate) in our house back in May 2013. We have a 7-month-old who had basically been sick his whole life with all the symptoms caused by formaldehyde poisoning (asthma, rashes, upper resp. infections, daily breathing treatments, constant wheezing) and we (including the pediatricians, who were trying everything) for the longest time could not figure out what was wrong with him until we saw the airing of 60 Minutes. We got our things and got out of our house while we could figure out what steps to do next. During the time out of the house (little over a month) my son started almost immediately doing better as did my wife, me and our little girl.
- ...our dogs have developed allergies and my youngest daughter who will be 4 in August has been running fever like an off and on switch every few weeks she runs a high fever for a couple of days then she's OK until the next episode. I'm not sure if this has to do with the flooring. I'm almost speechless on one hand I want to rip the floor out on the other we don't have the money to put flooring back in...So at this point I'm not sure what to do.
- I had head and chest congestion the whole time we were installing the floor. My friends teased me that maybe I was allergic to the floor. I was at the doctors so many times that he sent me to an allergist. Severe symptoms subsided when we finished putting down the floor. But I still use an inhaler when I exercise.



# It's Easy to Find LL Customers Suffering Symptoms Consistent With Formaldehyde Exposure (2)



- My symptoms are burning eyes and nose and coughing up phlem at night. Also have itchy skin. My two dogs also cough. I thought they had kennel cough, but now think it is the flooring... Open your windows and air the place out frequently, especially before bed. Then pray this gets settled soon as I read that the off gassing can last 10 years.
- I was doing some reading of scientific papers on this formaldehyde effects, wondering two things. 1. Could my tremors that I have had for the past few month be related to this? Sadly, yes. It also cause neurological damage. 2. How long does outgasing go on with a product like laminate flooring. Bad news again. It was estimated to be in the 10 year range.
- ...we have had boughts of sore throays, burning eyes and my son and I always have stuffy, runny noses.
- ...the itching was so sever I literally had scratches all over my body – it was insane...
- ...my husband...has had MAJOR skin issues...
- ...our children and dogs and I have had multiple issues...
- My husband has had major skin issues since installation (he installed it).
- We both have runny noses and burning eyes.

# Formaldehyde Isn't Asbestos, However



- The levels of formaldehyde Lumber Liquidators' customers are being exposed to are likely causing a range of adverse health effects, some even debilitating and requiring medical attention, with possible long-lasting effects.
- There are three mitigating factors, however:
  - a) Formaldehyde, at the levels and length of exposure at issue here, is unlikely to cause cancer;
  - b) The most common symptoms can be caused by many things, not just formaldehyde, so in court the company will surely claim other causes for its customers' ailments; and
  - c) Formaldehyde dissipates ("off-gasses") in 3-10 months.
- For these three reasons, Lumber Liquidators' problem, while serious, isn't as serious as asbestos because:
  - a) Exposure to asbestos can cause a much more serious illness: mesothelioma, an often-deadly form of cancer;
  - b) Asbestos exposure is pretty much the only way to get mesothelioma; and,
  - c) Asbestos doesn't off-gas in the environment, nor does it dissipate in the body.

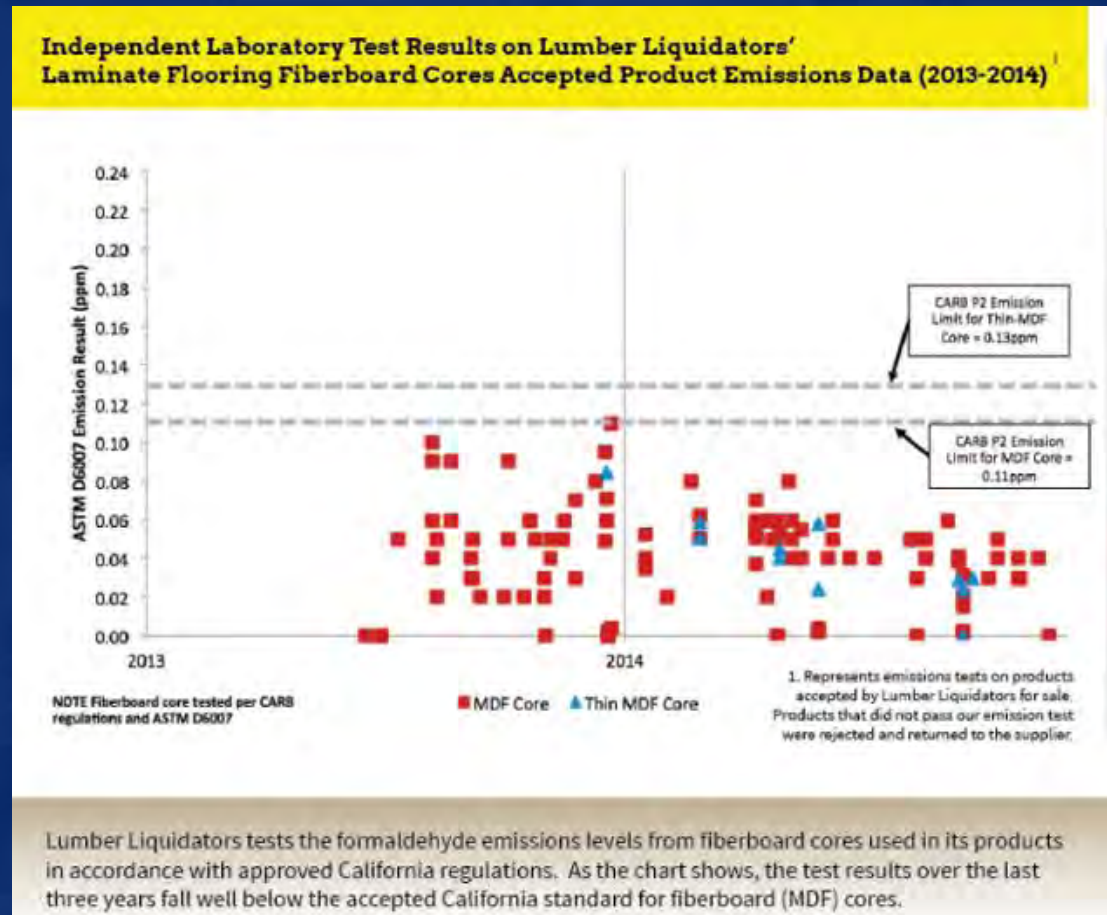
# But This Doesn't Mean Lumber Liquidators Is Off the Hook



- The fact that formaldehyde isn't as serious as asbestos is great news for Lumber Liquidators and its customers and installers, but it doesn't mean the company is off the hook.
- Many, many people – perhaps tens of thousands, maybe more – have likely been harmed and suffered adverse health effects, ranging from unpleasant to debilitating.
- But in one critical way, things may be much worse for Lumber Liquidators than for the companies associated with asbestos:
  - Asbestos wasn't known to be a dangerous product when most of these companies were mining, using and/or installing it, so they could honestly claim that they had no idea they were endangering their employees and customers.
  - In contrast, I think it's highly likely that the senior managers of Lumber Liquidators knew that they were buying toxic, formaldehyde-drenched, non-CARB compliant laminate from their Chinese suppliers, knowingly putting untold numbers of American families at risk.

# Lumber Liquidators' Defense – MDF Cores Are Compliant (1)

- As part of its first web site responding to the crisis (since removed), LL showed this chart of test results of the MDF cores it claims were used to make its laminate flooring:





# Lumber Liquidators' Defense – MDF Cores Are Compliant (2)

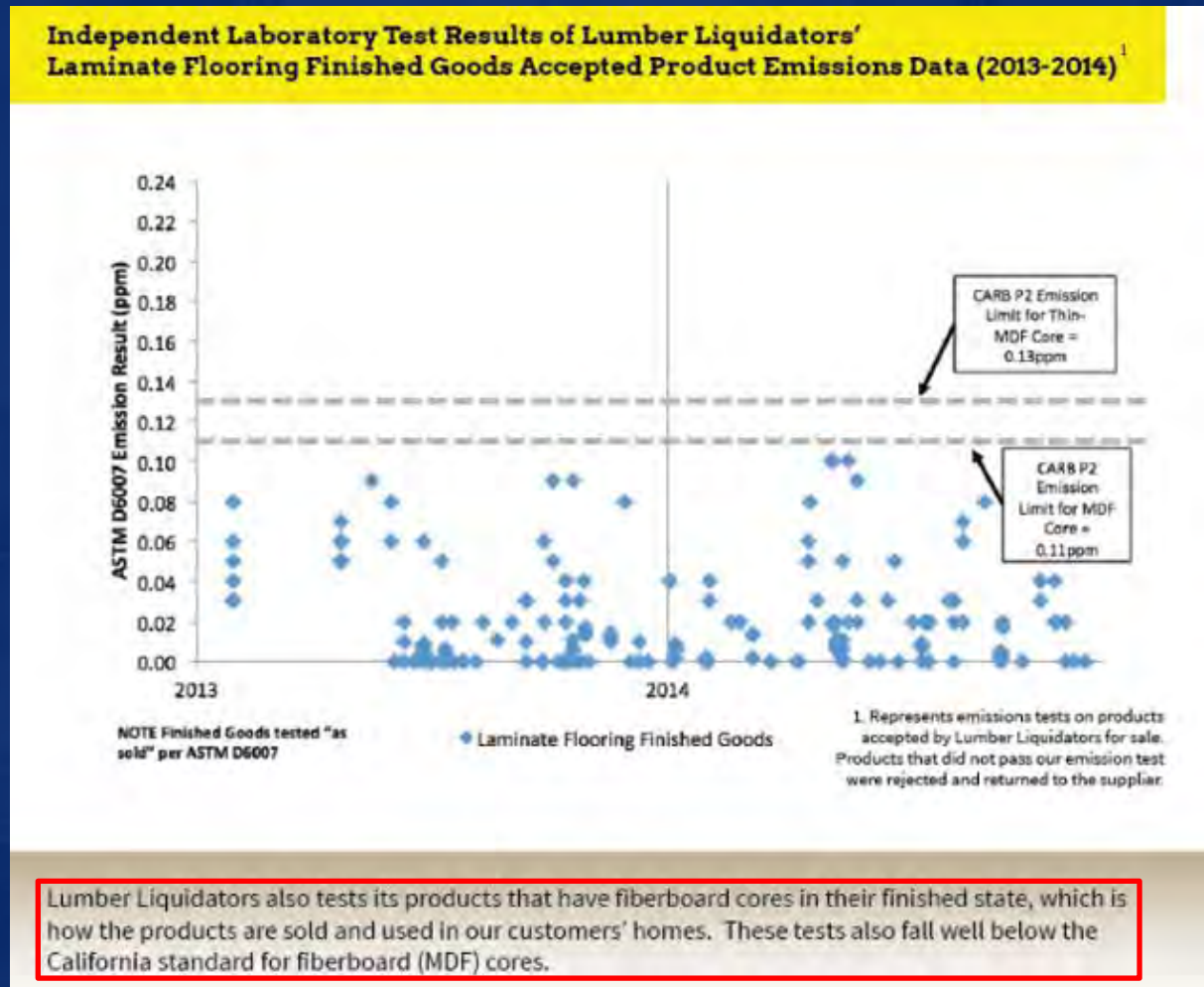


- Based on my conversations with a number of experts, it's not possible for formaldehyde levels of the finished product that 60 Minutes, Drury and I all independently tested to be as high as they were – 6-7 times CARB2 limits – if the MDF cores had low levels of formaldehyde.
- Thus, either the test results are bogus or, more likely, the MDF tested (and shown to be compliant) wasn't what was used to produce the laminate LL bought.
- It would be very easy for the Chinese laminate mills to cheat. They produce both CARB-compliant and non-CARB-compliant laminate, depending on customers' wishes, so they could simply produce the latter for Lumber Liquidators (using cheap, non-CARB-compliant MDF), while providing the company with the documentation it desired showing CARB2 compliance.
- The mills may also be using corrupt and/or conflicted inspectors. An industry insider with first-hand knowledge of many mills that Lumber Liquidators buys from told me:

"What even LL does not know is their own QC (quality control) inspector is paid a commission by the factories. This inspector knows there's no way to make CARB2-compliant product at the prices LL demands, especially after he takes his cut of the price."
- I have no way to verify this statement, but: a) I believe the person is credible; and b) It's consistent with what I know about China – namely, that creating phony documents is very common.

# Lumber Liquidators' Defense – Its Finished Product Is Compliant (1)

- LL also showed this chart of test results of the finished product:





# Lumber Liquidators' Defense – Its Finished Product Is Compliant (2)



- The problem with this test is that Lumber Liquidators didn't “deconstruct” the finished product (i.e., sand off the veneer/outer layer).
- The formaldehyde is in the MDF and resins used to make the laminate, so it's mostly sealed in by the veneer.
- Thus, testing how much formaldehyde is emitted by the laminate sample without deconstruction (especially when the sides and back of the sample are sealed) will of course show minimal levels of formaldehyde.
- CARB was aware of this when developing its testing methodologies and standards. It set a standard based on the formaldehyde in the MDF, so naturally it requires deconstruction prior to testing finished product.
- Lumber Liquidators says: "60 Minutes used a 'deconstructive test,' which would be like testing the emissions of a car by removing the catalytic converter and muffler."
- This is a spurious analogy. A correct one would be if the emissions standard for cars was set by regulators based on a test in which the catalytic converter and muffler were removed, and then a company rigged the test by not removing them – and then (falsely) reported that its cars met the standard.

# More on Deconstruction (1)



- Lumber Liquidators says that "CARB has indicated to us that no one in the industry is required to conduct deconstructive testing for compliance purposes."
- This is a typical statement from Lumber Liquidators: true but highly misleading and disingenuous.
- It's true that CARB does not require testing finished products – only the MDF core prior to being processed into laminate.
- But many companies that sell laminate (including Lumber Liquidators), to their credit, test the finished product for the logical reason that, especially when you're dealing with Chinese manufacturers, it's important to trust but verify.
- *However, if testing of finished product is done, CARB clearly specifies that it must first be deconstructed.*

# More on Deconstruction (2)



- While plenty of people and companies (including, of course, Lumber Liquidators) question whether this is the right way to do the testing, there's no question that CARB requires it – it's under the frequently asked questions section of its web site (emphasis added):
  - 42. How will CARB test pre-assembled case goods made of composite wood products (e.g., a small table) that are painted, with no edges unsealed?

CARB will purchase case goods, *deconstruct them*, remove the paint, and test the exposed composite wood product surface using our enforcement test method. CARB staff has developed the sample preparation protocol to be followed to *remove the layer of paint or laminate*, and then will determine if the composite wood product in the case good complies with applicable standards or not.
- Contrary to Lumber Liquidators' claims, deconstruction isn't a new or unproven test method. Rather, it was developed over several years, with industry consultation and peer review, and was finally published in 2013.

# More on Deconstruction (3)



- CARB's Final Statement of Reasons (FSOR) on page 42 states:  
Agency Response [24-Landry-070423-CWIC]: Yes it is correct that finished products must be deconstructed to test for compliance. But, we disagree that there is great uncertainty in the enforcement program. Deconstructive testing is needed for finished goods to verify compliance with the emission standards.
- And on page 231 states:  
Agency Response [20.4-Bradway-080215-Mannington]: ...To determine if compliant materials are being used to make finished goods, we must deconstruct the finished good and test its component parts...
- To summarize, the regulation and the official legislative history make clear that finished composite wood products should be tested through deconstructive testing and that CARB would be developing a sample preparation method for such testing. That method is the SOP (Standard Operating Procedures), an official CARB agency guidance document that is consistent with the regulation and therefore has the force of law and is entitled to deference. Lumber Liquidators' argument that the SOP is to be ignored makes no sense and ignores black-letter legal principles. Instead, the SOP is an official CARB agency document entitled to great deference.

# More on Deconstruction (4)



- Kip Howlett, the President of HPVA, which operates HPVA Laboratories, a CARB-certified lab that I hired to test samples of Lumber Liquidators' products, said:

“CARB has an SOP (Standard Operating Procedures) where you take the surface layer off to test the formaldehyde level in the core. So when you have five labs follow the SOP and remove the surface layer – and all show levels of formaldehyde higher than the CARB2 standard, you have a problem. And when it's 1,000% higher, you have a big problem!

When you have five labs all doing it the same way and getting the same results, it isn't about the test method. The company either didn't understand the SOP, or did understand it and did a work-around. They're either stupid or they're lying – which is it?

Another problem they have is that if you stamp the box “CARB2 compliant”, you had damn well better be CARB2 compliant.

It's telling that the American-made laminate was all compliant, but every sample from China wasn't. The Chinese producers are completely and totally unfairly competing with American and Canadian companies who abide by the law and produce safe laminate.”



# Another Type of Test: “Exposure Scenario”



- Rather than testing samples in a lab, what most people really care about is how much formaldehyde people are actually exposed to.
- To measure this, one must use an “exposure scenario” test, which follows rigorous protocols established by the California Department of Public Health (CDPH), including making assumptions that are widely accepted and scientifically based regarding various factors such as the temperature, humidity and air circulation in the home.
- This "exposure scenario" test is what the Consumer Product Safety Commission is doing.
- Lumber Liquidators claims that its tests "measure a product according to how it is actually used by consumers," which at first glance might lead one to conclude that it's done exposure scenario tests, but in fact it hasn't (or at least hasn't disclosed this). Rather, this is the company's way of saying it doesn't deconstruct its samples prior to doing chamber tests.

# Dr. Philip Landrigan's Comments on the Exposure Scenario Test Results



- 60 Minutes commissioned three exposure scenario tests of samples of Lumber Liquidators' Chinese-made laminate, which showed formaldehyde levels of 57, 93 and 268 ppb.
- 60 Minutes showed these test results to Dr. Philip Landrigan, one of the world's leading experts on formaldehyde and exposure to toxic chemicals, and here's what he said:

Dr. Philip Landrigan: It's not a safe level, it's a level that the US EPA calls polluted indoor conditions.

Anderson Cooper: Would you want that in your home?

Dr. Philip Landrigan: No.

Dr. Philip Landrigan of N.Y.'s Mt. Sinai Hospital, specializes in environmental pediatrics and exposure to toxic chemicals. He's talking about the results of another kind of test Drury and Larson conducted measuring the concentration of formaldehyde emissions coming off the laminates into the air of a typical home.

Dr. Philip Landrigan: I would say long-term exposure at that level would be risky because it would increase the risk for chronic respiratory irritation, change in a person's lung function, increased risk of asthma. It's not going to produce symptoms in everyone but children will be the people most likely to show symptoms at that sort of level.

# There Are Many Sources of Formaldehyde



- According to the Environmental Protection Agency (EPA), "Everyone is exposed to small amounts of formaldehyde in the air" because formaldehyde is found in:
  - Resins used in the manufacture of composite wood products (i.e., hardwood plywood, particleboard and medium-density fiberboard)
  - Building materials and insulation
  - Household products such as glues, permanent press fabrics, paints and coatings, lacquers and finishes, and paper products
  - Preservatives used in some medicines, cosmetics and other consumer products such as dish washing liquids and fabric softeners
  - Fertilizers and pesticides
- It is a byproduct of combustion and certain other natural processes, and so is also found in:
  - Emissions from un-vented, fuel burning appliances, like gas stoves or kerosene space heaters
  - Cigarette smoke
- The primary way you can be exposed to formaldehyde is by breathing air containing off-gassed formaldehyde. Everyone is exposed to small amounts of formaldehyde in the air that has off-gassed from products, including composite wood products.

# So Why Worry About the Formaldehyde in Lumber Liquidators' Flooring?



- I asked Dr. Philip Landrigan the following question:  
Given all of these sources of formaldehyde, why should anyone be worried about a little bit more from Lumber Liquidators' laminate?
- He replied:  
It all depends on how much someone is exposed to. Substances considered toxic are harmless in small doses and, conversely, an ordinarily harmless substance can be deadly if over-consumed.
- Exactly. For all the talk about the many sources of formaldehyde in a home, various studies have shown that the average American is actually exposed to very low and declining levels of formaldehyde in their home.
- The most recent study found the "mean concentration of formaldehyde...in housing of 17 ppb...(and) a mean level of formaldehyde for mobile homes or trailers ranging from 15.5 to 24.7 ppb." (Note that this study is a decade old, so levels are likely even lower today.)
- This trend of declining formaldehyde levels in the average home is a testament to the effectiveness of strong environment regulation and is great news for American families.



# Regulators Have Set Various Limits (1)

- There is no national law setting a limit for formaldehyde in indoor air – rather, various regulators have come up with vastly different numbers, as this table shows:

A Comparison of FEMA, NIOSH, HUD and OSHA Standards for Formaldehyde Exposure revised by IAQ Services Smart D Bagley, MS, CDE, November 12, 2007				
	FEMA	NIOSH	HUD	OSHA
Formaldehyde Exposure Limits- 8 hours	Maximum concentration – Less than 16 parts per billion (ppb) or 0.016 ppm as directed by FEMA. Samples shall be taken for eight (8) continuous hours. Following the 7-day and 14-day waiting period, the indoor air for each unit shall be tested to document that the IAQ is below the required threshold limits.	NIOSH REL: Ca TWA 0.016 ppm or 16 parts per billion (ppb)[1]. This is a workplace limit.	A 1985 HUD regulation covering the use of pressed wood products in manufactured housing was designed to ensure that indoor levels are below 0.4 ppm[2]. No time limit noted.	8-hour TWA - Permissible Exposure Limit (PEL) - The employer shall assure that no employee is exposed to an airborne concentration of formaldehyde which exceeds 0.75 parts formaldehyde per million parts of air (0.75 ppm) as an 8-hour TWA. This is a workplace limit.
Ratio of Limits: Compared to FEMA		FEMA's 8-hour limit is exactly the same as the NIOSH Limit. Ratio of FEMA to NIOSH std. is: $1.0 / 0.016 = 62.5$	FEMA's limit is exactly <b>25 times</b> more stringent than HUD's limit of 0.4 ppm. Ratio of FEMA to HUD std. is: $0.400 / 0.016 = 25$	FEMA is nearly <b>47 times</b> more stringent than OSHA's PEL of 0.75 ppm. Ratio of FEMA to OSHA standard is: $0.75 / 0.016 = 46.9$
Exposure Limits- Short Term	none	C 0.1 ppm [15-minute]	none	Short Term Exposure Limit (STEL): The employer shall assure that no employee is exposed to an airborne concentration of formaldehyde which exceeds two parts formaldehyde per million parts of air (2 ppm) as a 15-minute STEL.
Recommended Monitoring Methods	Miran SaphiRe infrared spectroscopy analyzer or similar direct-reading electronic instrumentation with data logging		none	Sampling media: Coated XAD-2 Tube (150/75 mg sections, 20/60 mesh); coating is 10% (w/w) 2-(Hydroxymethyl) piperidine or diffusive sampler
Additional FEMA Exposure Limitations	Total Volatile Organic Compounds (TVOCs) – Maximum concentration – 500 micrograms per cubic meter ( $\mu\text{g}/\text{M}^3$ ) Particulates (PM10) Maximum concentration – 50 $\mu\text{g}/\text{M}^3$ 4-Phenylcyclohexene (4-PCHE) – Maximum concentration – 6.5 $\mu\text{g}/\text{M}^3$			

- [1] NIOSH Pocket Guide to Chemical Hazards, September 2005 (NIOSH is the National Institute for Occupational Safety and Health, a division of the Centers for Disease Control and Prevention)
- [2] AN UPDATE ON FORMALDEHYDE, 1997 REVISION, U.S. CONSUMER PRODUCT SAFETY COMMISSION, WASHINGTON, DC 20207



# Regulators Have Set Various Limits (2)



In addition, here are three more data points:

1. The California Office of Environmental Health Hazard Assessment (COEHHA) sets formaldehyde limits of 55 micrograms per meter cubed for acute (short-term) exposure and 9 micrograms per meter cubed [7 ppb] for 8-hour and chronic exposure.
2. COEHHA, in another document, sets formaldehyde limits of 40 micrograms per meter cubed [33 ppb] for "No Significant Risk Levels (NSRLs) for Carcinogens."
3. The California Air Resource Board (CARB), in a 2004 report entitled *Formaldehyde in the Home*, notes that adverse health effects begin at 40 ppb and, in addition, citing a study by COEHHA, concluded that:

For an eight-hour exposure time, no short-term adverse effects would be expected to occur if average levels do not exceed 27 ppb (OEHHA's interim 8-hour REL).

However, people often spend more than eight hours a day in their homes; infants, young children and the infirm sometimes spend virtually the entire day inside their home. Thus, it is highly desirable that residential levels remain well below 27 ppb to avoid acute effects in such individuals. To avoid irritant effects, air concentrations in new homes, including manufactured homes, also should not exceed 27 ppb.

(Note that a 1991 report by CARB, entitled *Formaldehyde in the Home, Indoor Air Quality Guideline No. 1 and Supplement*, set 100 ppb as an "action level" and 50 ppb as a "target level," but this has been superseded by the 2004 CARB report.)

# Regulators Have Set Various Limits (3)

- To summarize, the seven regulators are all over the map, at 7 ppb at the low end and 750 at the high end, as this table shows:

Formaldehyde	
<u>Regulator</u>	<u>Limit (ppb)</u>
COEHHA	7
FEMA	16
NIOSH	16
CARB	27
COEHHA	33
HUD	400
OSHA	750

- Recall that the three samples of Lumber Liquidators' Chinese-made laminate that 60 Minutes had tested came in at 57, 93 and 268 ppb, so depending on which standard one uses, one could conclude that the laminate is far (8-38 times) above a safe level of 7 ppb – or that's it's well below the HUD and OSHA levels.
- What should we conclude? And, more importantly, after numerous federal regulators such as the Consumer Product Safety Commission and EPA finish emissions tests on Lumber Liquidators' Chinese-made laminate, what are they likely to conclude?

# Regulators Are Likely to Set a National Standard at a Low Level (1)



My view is that regulators are highly likely to set a national standard somewhere in the range of the very low levels established by COEHHA, CARB, NIOSH and FEMA for six reasons:

1. The HUD and OSHA standards are very out of date: the former was established 30 years ago in 1985 and the latter was last revised 23 years ago in 1992. Since then, the science on formaldehyde has improved dramatically, and there's now far greater awareness of its dangers (it's been established as a known carcinogen, among other things), which are reflected in the more recent and much lower levels set by other regulators.
2. The OSHA standard is for a workplace (i.e., adults, eight hours per day) whereas, for flooring, regulators will be concerned about babies and children in homes pretty much 24/7.
3. There are five data points between 7 and 33 ppb – and two extreme outliers. Where do you think regulators are likely to set the national standard?

# Regulators Are Likely to Set a National Standard at a Low Level (2)



4. Note that the maximum formaldehyde levels in the table above are for all formaldehyde in indoor air, not just from flooring, so when regulators set a level for flooring only, they are likely to pick an even lower number.
5. The regulatory agencies looking into this are part of a Democratic administration that's been very strong on environmental issues.
6. Given that there will always be some level of ambiguity – it's not like anyone can definitively say "16 ppb is safe, but 17 isn't" – I can't think of any reason why an agency charged with protecting consumers would want to take any risk.

My answer: they won't. I think regulators are almost certain to set a standard in the 7-33 ppb range (probably much closer to the low end), which means all three Lumber Liquidators samples 60 Minutes had tested are far out of compliance.

Assuming the regulators' tests show similar results, it's unclear what actions they might take, but I suspect they'll be very onerous for Lumber Liquidators – and its stock.

# What About Lumber Liquidators' Claim That 97% of Its Customers' Homes Have Safe Levels of Formaldehyde? (1)



- On May 7<sup>th</sup>, Lumber Liquidators disclosed:

## *Initial Indoor Air Quality Testing Program Results*

Initial results of the indoor air quality testing program for certain laminate flooring customers – conducted by independent, accredited laboratories – indicate that over 97% of customers' homes were within the protective guidelines established by the World Health Organization for formaldehyde levels in indoor air...

... While various groups have recommended higher or lower levels, there is currently no national standard for recommended indoor home air concentrations in the United States. The company has used the guideline established by the World Health Organization, which is an international consensus standard that draws on recent research and the expertise of the many governments, academic institutions and researchers that have studied formaldehyde emissions.

- Phew, we can all breathe a big sigh of relief, right? WRONG!



# What About Lumber Liquidators' Claim That 97% of Its Customers' Homes Have Safe Levels of Formaldehyde? (2)



These results are meaningless for three reasons:

1. The testing program, according to expert testimony, is "the cheapest possible way to test," "cannot be considered valid" and "will likely provide some consumers with poor data that give them a false sense of security." In short, Lumber Liquidators has rigged the testing program to show the results it seeks.
2. For many customers, the formaldehyde will have off-gassed – a process that can take anywhere from a few months to a year or two. Thus, even if the testing program was rigorous and legitimate, it would show low levels of formaldehyde in the air of most customers' homes (I'd guess pretty much all of them who'd installed their flooring more than a year ago). But that doesn't mean that they weren't being poisoned to a significant degree in the first year or so after the flooring was installed. And it certainly doesn't mean that the Chinese-made laminate that Lumber Liquidators was selling until very recently is safe – in fact, all of the evidence indicates that it's not.
3. The WHO standard of 81 ppb that Lumber Liquidators chose is among the highest of any regulators and is certainly not the appropriate standard for flooring in one's home, where babies and children might be playing/crawling on the floor for many hours every day. Four different American regulators have set limits for homes ranging from 7-33 ppb.

# What About Lumber Liquidators' Claim That 97% of Its Customers' Homes Have Safe Levels of Formaldehyde? (3)



Here are questions Lumber Liquidators needs to answer:

1. Why isn't Lumber Liquidators offering customers a professional test conducted by an Industrial Hygienist or other accredited technician?
2. If a homeowner pays for a professional test themselves, will Lumber Liquidators honor the results?
3. What are the results broken down by how recently the flooring has been installed? What's the average formaldehyde level for flooring installed in the past month, 3, 6, 12, 18 and 24+ months?
4. What were the exact results: how many were below 10 ppb, 10-20, 20-30, 30-50, 50-75, 75-100, 100-200, and 200+?
5. Why did Lumber Liquidators choose the WHO standard and ignore standards for the home set by CARB, FEMA, NIOSH and the California Office of Environmental Health Hazard Assessment?
6. For customers with formaldehyde levels exceeding the WHO standard, Lumber Liquidators makes only a vague promise to "take additional steps that may include further in-home air testing and testing of floor samples from the customer." Why does the company think customers will be satisfied with this lame offer? Why doesn't it act with urgency and offer to pay for the family to immediately move out of their home if they wish until the flooring can be replaced, and give a full refund?

# Thoughts on Lumber Liquidators' Decision to Suspend Sales of Chinese-Made Laminate on May 7th

- I believe that halting sales after selling thousands of American families tens of millions of dollars of toxic flooring in the 67 days after the 60 Minutes story aired is too little, too late, as the damage has already been done.
- It likely means that Lumber Liquidators is under immense pressure from regulators, who will, I expect, take decisive action to rein in and punish this rogue company.
- I simply don't believe Lumber Liquidators would halt sales of its own volition, given that it must now write off ~\$13 million of inventory and be out of stock on some of this high-margin product for many months, which will seriously impact results for the second and third quarters.
- One source tells me that the decision to halt sales was made by the board, over management's objections, which, if true, means that perhaps they kept the board in the dark about their nefarious actions.
- Lumber Liquidators tried to sell all the Chinese-made laminate it could right up until the stores closed on May 6<sup>th</sup>, according to a friend of mine who sent me this email:  
What's amazing is I had heard hints of this and have been calling stores this week. I spoke with three stores in Florida and all three told me I could buy the (Chinese-made laminate) product on Tuesday or Wednesday, but had to pick it up by Wednesday night. So, they were actively selling it while knowing that they were going to pull it. That's a dream for a class action attorney...

# Implications of Rob Lynch's Sudden and Unexpected Resignation (1)



- I was shocked by this announcement because it undermines all of the company's denials.
- CEOs with nothing to hide don't suddenly resign and/or companies with nothing to hide don't suddenly fire their CEOs.
- It is powerful evidence that what I've been saying all along is true: Lumber Liquidators has been knowingly poisoning its customers with toxic, formaldehyde-drenched laminate flooring and, in general, is a notorious bad actor.
- It's further evidence that Lumber Liquidators is likely under immense pressure from regulators.
- I think Lumber Liquidators' board members are finally waking up to what really happened, are rightly panicked about the implications, both for the company and their own personal liability, and are seizing control of the situation. Thus, Lynch was likely under pressure from the board, saw the writing on the wall, and decided to jump before being pushed.
  - I heard from one source that Tom Sullivan blames Lynch for everything that's happened and engineered his ouster.



# Implications of Rob Lynch's Sudden and Unexpected Resignation (2)



- I doubt that Lumber Liquidators was ever a corporate exemplar, but I'm not sure that it was always a notorious bad actor.
- I've heard from numerous people that when Lynch became CEO at the beginning of 2012, the company's sourcing and compliance procedures as well as how it treated vendors and installers got much worse – all part of an effort to increase margins, profitability and, of course, the stock price in the short term, long-term consequences be damned.
- If Lynch was, in fact, a major source of the rot in the company, then his departure is good news for Lumber Liquidators and everyone who interacts with it, most importantly customers.
- If the few remaining bulls on this stock are looking for a silver lining to Lynch's resignation, this is it.



# This Isn't a Short-and-Distort Campaign



- I've spent my entire life building a good reputation. Of course I have an interest in making money – that's my job – but the idea that I would destroy my reputation by inventing a story to smear an innocent company to benefit a ~3-4% position in my portfolio is beyond absurd.
- It would also be easy for the company to show that I'm lying – and I'd likely end up banned from the industry or even in jail.
- One might not agree with my analysis or conclusions, but know that my beliefs are genuinely held.
- Rather than having a conflict of interest, I believe I have a confluence of interest: in speaking out, I am both doing my job and also serving the public interest by warning others about the possible dangers posed by certain Lumber Liquidators' products.
- I find it quite ironic that the company is accusing me of distorting the truth for my own financial gain when it is, in fact, the senior executives of the company who have far greater incentives to do so than I.
  - This is one of two dozen positions in my fund (only six of which are shorts), so it's not going to make or break me one way or another.
  - In contrast, the outcome of this battle means everything to founder and Chairman Tom Sullivan and CEO Robert Lynch, both reputationally and financially. Sullivan currently owns 608,998 shares – still worth a pretty penny – and both were heavy sellers in mid-2013, after the stock had soared, pocketing \$26.7 million and \$10.6 million, respectively.

# There is No Conspiracy of Short Sellers



- Contrary to the company's claim that "These attacks are driven by a small group of short-selling investors who are working together...", there's no such conspiracy (at least to my knowledge).
- I have no idea who the hedge fund(s) are behind Sunshine Park LLC, nor have I met or had any communication with Denny Larson, the executive director of Global Community Monitor, or Richard Drury, the prominent environmental attorney, both of whom were featured in the 60 Minutes story.
- I can only assume that the hedge fund(s) behind Sunshine Park figured out, as I did, that Lumber Liquidators was poisoning its customers, but chose a different route than I did to be an activist (by hiring Larson and Drury).

# It's Possible But Not Likely That Lumber Liquidators Will Go Bankrupt



- My best guess is that there is a 30% chance of Lumber Liquidators eventually filing for bankruptcy.
- If it happens, it would likely not happen for a while (maybe two years).
- As of Q1 '15 (March 31<sup>st</sup>), the company had \$44 million of cash and only \$20 million of debt, so it has net cash of \$24 million.
- On April 24<sup>th</sup>, Lumber Liquidators expanded its credit line to \$100 million total (though no greater than “50% of the cost of eligible inventory...plus 90% of credit card transactions which have not settled, less certain reserves”), of which \$79.1 million was available.
  - “The Company has the option to increase the Revolving Credit Facility up to a maximum of \$175 million subject to the satisfaction of the conditions to such increase specified in the Credit Agreement.”
- The company is consistently cash flow positive:
  - Cash flow from operating activities was \$57 million in 2014 vs. cap ex of \$71 million (most of this was for growth and can be cut)
  - Cash flow from operating activities was \$13 million in Q1 '15 vs. cap ex of \$9 million
- Only two things could cause a bankruptcy filing:
  1. Sales collapse 20-30% or more and stay depressed (likely due to revelations that the company was knowingly poisoning its customers) and the company is forced to slash prices to maintain foot traffic, resulting in significant negative cash flows
  2. Costs associated with legal and regulatory action (remediation, penalties, settlements, judgements, etc.) swamp the company.

# What I Expect to Happen Next



- I see nothing but bad news emerging for the company over the short-, intermediate- and long-term horizons.
- I think regulators (most likely the California Air Resources Board and the Consumer Product Safety Commission) will announce that their tests of Lumber Liquidators' Chinese-made laminate show the same (very high) levels of formaldehyde shown by the tests 60 Minutes, myself and others commissioned.
- At that point, I expect regulators to take strong action against the company, including fines/penalties, requiring proper testing, and remediation steps.
- I think that the legal liabilities will be enormous, especially once hard evidence emerges that the company was knowingly poisoning its own customers.
  - I see the largest legal exposure in two areas: a) damages to customers who suffered adverse health effects and b) damages to investors who bought the stock at inflated prices based on information (the true source of margin and profit expansion) that management knew was false.

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