

Ingersoll-Rand (IR) EQ Review

Current EQ Rating*	Previous EQ Rating
4-	na

6- "Exceptionally Strong"
5- "Strong"
4- "Acceptable"
3- "Minor Concern"
2- "Weak"
1- "Strong Concerns"

Note that a "+" sign indicates the earnings quality improved in the most recent quarter while a "-" sign indicates deterioration

*For a more detailed explanation of the EQ Review Rating scale, please refer to the end of this report

We initiate earnings quality coverage of IR with a 4- (Acceptable) rating.

Overall, we see IR's earnings as being mostly "clean" but we do have the following observations that investors should be aware of when viewing the company's headline earnings numbers.

- IR sells extended warranties with certain products. It defers the associated revenue and recognizes it "on a straight-line basis over the life of the contract, unless another method is more representative of the costs incurred." The latter part of the description seems to indicate some subjectivity that could conceivably leave open the possibility to manipulate revenue recognition. The company's disclosures allow us to calculate the amount of the extended warranty deferral amortized in a quarter as a percentage of the average deferred balance. This figure increased sequentially in the 9/19 quarter as the sequential increase in warranties issued in the period significantly lagged the amount amortized into revenue. We estimate this could have added as much as a penny per share to EPS in the period. However, we are not especially concerned given the small amount and the fact that there was a large increase in warranties issued in the 6/19 quarter. Nevertheless, this is an area to monitor on a regular basis.

- IR regularly records material amounts under results of discontinued operations. Such disclosures typically relate to business units that are intended to be sold in the foreseeable future and will therefore not continue to impact ongoing operations. However, in the case of IR, these amounts relate to obligations including asbestos-related payments and receipts, litigation costs, and postretirement benefit payments that the company agreed to retain at the time it divested those businesses. These amounts fluctuate and can be very material. Since they are included in discontinued operations, they are not reflected in headline earnings numbers or non-GAAP disclosures and are likely dismissed by most investors despite the fact they will likely continue to impact shareholders' equity well into the future.
- With respect to the above point, we do not have a problem with adjusting out large asbestos-related payments and receipts when calculating a figure intended to represent ongoing operating growth. With that in mind, we note that the company does not adjust the asbestos-related amounts generated in its *continuing* operations out of its non-GAAP disclosures. While these amounts are much smaller than those included in discontinued operations, they can be materially positive or negative to a particular quarter. Case in point, the increase in asbestos-related income in the 9/19 quarter added about a penny per share to results.

Recognition of Warranty Revenue

One issue to monitor with IR's accounting is its recognition of revenue from issuing extended warranties. The company's description of its accounting for extended warranty revenue reads:

“The Company's extended warranty liability represents the deferred revenue associated with its extended warranty contracts and is amortized into *Net revenues* on a straight-line basis over the life of the contract, ***unless another method is more representative of the costs incurred.***”

(Note that these extended reserves are separate from the company's standard product warranties for which the company also establishes reserves at the time of sale.)

The following table shows the development of the extended warranty deferred revenue account for the last eight quarters and the calculation of amortization of deferred revenue as a percentage of the average liability balance outstanding during the period:

	9/30/2019	6/30/2019	3/31/2019	12/31/2018
Amortization of Deferred Revenue for the Period	-\$32.5	-\$28.8	-\$27.2	-\$30.3
Additions for Extended Warranties Issued During Period	\$35.6	\$34.6	\$28.4	\$32.5
Changes to Accruals Related to Preexisting Warranties	\$0.0	-\$0.1	-\$0.2	-\$0.6
Translations	-\$0.7	\$0.2	\$0.0	-\$0.6
Deferred Extended Warranty Revenue Ending Balance	\$301.5	\$299.1	\$293.2	\$292.2
Amortization of Def. Rev. % of Avg. Reserve Balance	10.82%	9.72%	9.29%	10.39%

	9/30/2018	6/30/2018	3/31/2018	12/31/2017
Amortization of Deferred Revenue for the Period	-\$30.1	-\$28.6	-\$26.0	-\$24.0
Additions for Extended Warranties Issued During Period	\$26.6	\$33.2	\$23.8	\$20.8
Changes to Accruals Related to Preexisting Warranties	\$0.2	\$0.2	-\$0.3	\$0.8
Translations	\$0.1	-\$1.3	\$0.4	\$0.2
Deferred Extended Warranty Revenue Ending Balance	\$291.2	\$294.4	\$290.9	\$293.0
Amortization of Def. Rev. % of Avg. Reserve Balance	10.28%	9.77%	8.91%	8.16%

Generally speaking, an increase in the amortization of deferred revenue relative to the reserve balance could be an indication of more aggressive revenue recognition. We estimate if the percentage of revenue recognized relative to the average deferred balance had remained constant with the previous quarter's level, it would have taken about a penny per share off of EPS in the quarter. However, this works both ways as the same exercise yields a penny per share drag on the 3/19 quarter.

For more perspective, the following table shows the sequential increase in warranties issued in the quarter and the sequential increase in extended warranties issued during the period.

	9/30/2019	6/30/2019	3/31/2019	12/31/2018
Amortization of Def. Rev. % of Avg. Reserve Balance	10.82%	9.72%	9.29%	10.39%
Sequential Increase in Warranties Issues	2.89%	21.83%	-12.62%	22.18%
Sequential Increase in Amortization of Deferred Revenue	12.85%	5.88%	-10.23%	0.66%

	9/30/2018	6/30/2018	3/31/2018	12/31/2017
Amortization of Def. Rev. % of Avg. Reserve Balance	10.28%	9.77%	8.91%	8.16%
Sequential Increase in Warranties Issues	-19.88%	39.50%	14.42%	-16.13%
Sequential Increase in Amortization of Deferred Revenue	5.24%	10.00%	8.33%	-21.05%

The 9/19 quarter does appear somewhat unusual in there was only a slight sequential increase in warranties issued while the increase in revenue recognized rose by almost 13%. This was a marked acceleration from the 6/19 quarter. It is possible that the large number of warranties sold in the 6/19 quarter fell later in the period so that quarter did not reflect a full period of amortization, thus inflating amortization in the 9/19 quarter relative to new warranties sold. Therefore, we are not especially concerned with the increase in the amortization of deferred revenue, especially given the fact that we are only dealing with a possible 1 cps boost. However, we do note that the company's description of its extended warranty accounting policy does seem to leave room open for subjectivity which makes this an area of potential abuse that should be monitored every quarter.

Ongoing Retained Obligations Are Included in Discontinued Operations

IR is still dealing with the fallout from its sale of products containing asbestos decades ago. The company's balance sheet reflects estimated asbestos-related liabilities of \$562.5 million offset by estimates for probable insurance recoveries of \$299.6 million. The resulting \$262 million net liability is not a material threat to the company's financial standing given the \$830 million in cash on the balance sheet and likelihood it will be paid out over many years. However, one aspect of the asbestos liabilities investors should be aware of is the fact that a portion of the ongoing activity related to settling the claims is included in results from discontinued operations. The asbestos litigation was aimed largely at the company's Trane operations which IR still owns, as well as some businesses which have since been sold—namely Ingersoll-Dresser Pump which was divested in 2000. Since the Ingersoll-Dresser operations were sold, the resulting asbestos-related payments and receipts have been included as classified as discontinued operations that are excluded from the company's non-GAAP numbers. The following table shows asbestos-related income and expense for the last 8 quarters broken out between continuing and discontinued operations:

Income/(Expense) Related to Asbestos Claims	9/30/2019	6/30/2019	3/31/2019	12/31/2018
Asbestos Income/(Expense) in Continuing Operations	\$3.7	\$5.9	-\$1.8	-\$11.7
Asbestos Income/(Expense) in Discontinued Operations	\$36.0	-\$2.5	-\$3.0	-\$35.6

	9/30/2018	6/30/2018	3/31/2018	12/31/2017
Asbestos Income/(Expense) in Continuing Operations	\$0.5	-\$0.7	\$1.5	-\$0.7
Asbestos Income/(Expense) in Discontinued Operations	-\$11.4	-\$2.3	-\$7.2	-\$34.8

Clearly, these amounts are volatile and can be very material in certain quarters. The bulk of these amounts is related to the Ingersoll-Dresser operations and are therefore lumped into discontinued operations. The purpose of discontinued operation disclosure is to show amounts that will soon not impact a company's ongoing operations. However, in this case, these payments will continue to impact IR well into the future. Thus, investors looking only at non-GAAP numbers from continuing operations are not getting the whole picture of the impact on the company's shareholders' equity in the period.

In addition to the asbestos liabilities, the company agreed to retain other obligations associated with its 2013 spin-off of its commercial and residential security business including postretirement benefits. As with the Ingersoll Dresser asbestos liabilities, these amounts are included in discontinued operations and therefore not reflected in adjusted EPS. The company does disclose the total amount of all expenses related to retained liabilities which is shown in the table below. Note that these amounts include the asbestos liabilities shown in the table above:

Earnings /(Loss) from Retained Obligations in Disc. Ops	9/30/2019	6/30/2019	3/31/2019	12/31/2018
Pretax Earnings/(Loss)	\$32.0	-\$7.9	-\$1.9	-\$48.8

	9/30/2018	6/30/2018	3/31/2018	12/31/2017
Pretax Earnings/(Loss)	-\$16.0	-\$8.6	-\$12.1	-\$40.7

By comparing to the above previous table, we can see that the bulk of the impact from retained obligations is related to the asbestos liabilities. However, there are still material non-asbestos related amounts that are being included in results from discontinued operations despite the fact they will likely recur into the future.

Asbestos-Related Amounts from Continuing Operations Not Adjusted Out of Non-GAAP

We discussed above that the company lumps the asbestos impact from previously divested operations into results of discontinued operations despite the fact that the company retained the obligation to pay them. It is typical for companies to exclude litigation related inflows and outflows from non-GAAP results. From that standpoint, we do not have a problem with the idea of excluding such payments from an adjusted earnings figure attempting to show the growth in the ongoing operations as long as investors are aware of the impact on cash flow and shareholders' equity. However, that brings up the issue that the company does not

exclude the asbestos-related expenses and income from its continuing operations from its non-GAAP adjustments. While the asbestos impact from continuing operations is not as large as that related to discontinued operations, it can nonetheless be material. In the case of the 9/19 quarter, the increase in asbestos-related income included in continuing operations was an approximate 1 cps boost while the 6/19 quarter benefitted by roughly double that amount.

Explanation of EQ Rating Scale

6- "Exceptionally Strong"	Indicates uncommonly conservative accounting policies to the point that revenue and earnings are essentially understated relative to the company's peers. Higher possibility of reporting positive earnings surprises
5- "Strong"	Indicates the company has no areas of concern with its reported results and we see very little risk of the company disappointing due to recent results being overstated from aggressive reporting in recent periods.
4- "Acceptable"	Indicates the company may have exhibited a minor "red flag", but the severity of the issue is not yet a concern. Minimal risk of an earnings disappointment resulting from previous earnings or cash flow overstatement
3- "Minor Concern"	Indicates the company has exhibited either a larger number of or more serious warning signs than companies receiving a 4. The likelihood of an immediate earnings or cash flow disappointment is not considered to be high, but the signs mentioned deserve a higher degree of attention in the future.
2- "Weak"	Indicates the company's recently reported results have benefitted materially from aggressive accounting. Follow up work should be performed to determine the nature and extent of the problem. There is a possibility that upcoming results could disappoint as the impact of unsustainable benefits disappears.
1- "Strong Concerns"	Indicates that the company's recent results are significantly overstated and that we view a disappointment in upcoming quarters is highly likely.

In addition to the numerical rating, the EQ Review Rating may also include either a minus or plus sign. A minus sign indicates that our analysis shows the overall earnings quality of the company has worsened since the last review and there is a possibility the numerical rating will fall should the problem continue into the next quarter. Likewise, a positive sign indicates that the overall earnings quality is improving, and the company may see an upgrade in its numerical rating should the trend continue.

Key Points to Understand About the EQ Score

The EQ Review Rating is much more than a blind, quantitative scoring method. While we utilize proprietary adjustments, ratios, and methods developed over decades of earnings quality analysis, the foundation of all of our analysis is reading recent SEC filings, press releases, conference call transcripts and in some cases, conversations with managements.

The EQ Review Rating is not comparable to a traditional buy/sell rating. The Rating is intended to specifically convey the extent to which reported earnings may be over/understated. Fundamental factors such as forecasts for future growth, increasing competition, and valuation are not reflected in the rating. Therefore, a high score does not in itself indicate a company is a buy but rather indicates that recent results are a good indication of the underlying earnings and cash generation capacity of the company. A low score (1-2) will likely result in us performing a more thorough review of fundamental factors to determine if the company warrants a full-blown sell recommendation.

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