XBRL: Getting Better, But Work Left To Do

Back in 2013, we wrote about all the errors and issues we discovered when attempting to use XBRL data for our models. Back then, even simple data points such as shares outstanding or dates were regularly wrong, or even missing, from company filings. In the past couple years, XBRL has definitely come a long way in terms of improving the quality of the data, but there's a lot of work left to do.

We've been able to integrate XBRL into our models to automatically update certain quarterly data points, but even that took months of continuous mapping and testing in order to reconcile custom tags, data points that don't sum up correctly, and errors made by reporters. For now, XBRL remains limited in its utility, difficult to use for those without significant time and expertise, and not totally reliable in terms of the accuracy of its data.

Custom Tags Undermine the Purpose Of XBRL

Custom tags the unique descriptions companies create when they believe one of their data points doesn't conform to the standard tags established by the XBRL GAAP taxonomy. Companies create custom tags on the fly. There's no way to know they have created one until you try to read the XBRL filing and realize the company has used a tag that you've never seen before. When companies use custom tags, a human is required to intervene, investigate the tag, and figure out what the data point truly signifies and how it fits into the big picture of the company's financials. Sounds a lot like what a human does when he/she reads a regular filing.

We've been following this issue ever since 2010, when the number of custom tags started to explode. Custom tags are a wrench in the gears of XBRL or any machine language. The foundational purpose of any kind of machine language is that human intervention is not required to collect or analyze the data. Custom XBRL tags require human interpretation and prevent XBRL from being a truly machine readable language.

There's no need for all these custom tags. After all, the XBRL reporting taxonomy contains over 17,000 tags. You'd think companies wouldn't have trouble finding a tag to fit almost any data point they might use. However, the massive number of tags actually contributes to the problem. With so many different possible tags—and with annual reports as long as some novels—it requires a massive amount of effort to search through all the tags to find the right one, so companies sometimes just use their own custom tags instead of going through all that effort.

The SEC's research shows that larger companies, the ones that have the resources to spend on ensuring XBRL accuracy, have been using fewer custom tags, but the number keeps going up for smaller companies. Many of these companies contract the work of preparing XBRL statements to cheap third-party providers that have little interest in doing anything but the bare minimum to ensure compliance. For small filers, over 10% of the tags they use are custom tags.

In order to resolve the issue with custom tags, we had to leverage the massive amount of work our forensic accounting expert analysts have done in parsing thousands of filings every year over the past decade. With all the expert-verified data in our system, we have an expansive library of our own tags that we match up to custom tags in order to determine how those data points should be treated. We are not aware of any of entity with this capability.

Major Errors In Reporting

Custom tags are a pain, but they are far preferable to tags that are completely wrong. It's no secret that XBRL data continues to have significant errors. It even formed a special committee recently to address the significant quality concerns. Many of these problems are simple errors that could easily be caught with software systems, such as incorrect positive/negative signs, required values not getting reported, or a data point getting attributed to the wrong corporate entity. Despite this fact, these errors still exist in large quantities, further undermining the utility of XBRL by increasing the dependence on humans to find and rectify errors.

Check out the huge number of errors that XBRL itself discovers. On August 10 alone it found 3,659 errors in 167 different filings. Some of these are relatively benign issues, but others are not. One of the filings, an annual 10-K report, had nine different instances of required values not being reported at all in the XBRL document.

Important Disclosure Information is contained on the last page of this report.
The recipient of this report is directed to read these disclosures.

No Enforcement

There are many simple automatic software checks that can find and report these issues. Unfortunately, there's almost no incentive for companies to take any concrete action relating to these errors, as there's no real enforcement mechanism to punish them for their mistakes.

This creates a self-reinforcing feedback loop. Investors tend to ignore XBRL data because it is so inaccurate, which means the SEC doesn't make cracking down on errors in XBRL data a priority, which means companies don't go to a great deal of effort to improve the accuracy of their data. There have been some small improvements as companies gain more experience using the system, but without any strong motivation to correct their errors it's hard to believe they'll eliminate them in the future.

When we set out to integrate quarterly XBRL data into our models, these errors caused numerous headaches. In our first trial, roughly 50% of the filings we processed contained errors that prevented the data from summing correctly. Improperly tagged or categorized numbers would prevent, for instance, the various components of Property, Plant, and Equipment from adding up to the total listed on the balance sheet.

Where this occurred, we had to dive into the extension documents that accompany the filing to check the company's calculations and figure out what went wrong. We've reached the point where we can automate most of this process, but even still we need our expert analysts to run manual checks to ensure data accuracy.

Still Limited Utility

So far, these limitations have prevented XBRL from seeing widespread use among financial professionals. Companies such as Calcbench have used it to make a great deal of data easily accessible, but the numbers are not integrated into any sophisticated models or analysis.

For our own part, it's take a great deal of time and effort from our analysts and engineers—who have spent years automating the extraction of data from SEC filings—to use XBRL to update the most basic data points in our model from quarterly filings. For the sophisticated footnotes analysis and earnings adjustments, we still rely on our expert analysts and our patented research platform to analyze annual filings.

For the average investor, without significant technical expertise or experience, XBRL is essentially unusable for analyzing an individual company, much less trying to compare data across the broader market. Hudson Hollister, founder of the Data Transparency Coalition, put it best when he said, "the theoretical benefits of transforming government information from documents into searchable data have not been realized in the SEC's disclosure regime."

What little data exists on XBRL use doesn't look good. A Columbia study from 2012 found that less than 10% of investment professionals use XBRL, and there's nothing to suggest that number has improved in the past few years.

Unfortunately, the relative apathy of most investors towards XBRL means it might struggle to realize these theoretical benefits. A bill that recently passed the House of Representatives and has gone to the Senate would exempt companies with less than $250 million in revenue from having to use XBRL. The argument is that the cost of reporting in this manner is too expensive for smaller companies given the small number of investors that actually utilize it.

Great Potential

We hope that this bill does not become law. For all its flaws, XBRL still has the potential to revolutionize investment research and financial reporting. If the data becomes more reliable and easier to use, it would not just simplify our own business, it would make financial data more transparent and easier to understand for the broader market. Better data means a more efficient market and a better allocation of capital, which is critical to the long-term health of our economy.

We're excited that the data has come far enough that we can start using it in our models, but it still needs to improve a great deal if it is going to have a real benefit to the broader market. Hopefully the SEC will put enough effort and resources into improving the taxonomy and enforcing accuracy by reporters so that we can all reap the rewards of this technology.

Disclosure: David Trainer and Sam McBride receive no compensation to write about any specific stock, sector, style, or theme.

New Constructs® – Profile

How New Constructs Creates Value for Clients

We find it. You benefit. Cutting-edge technology enables us to scale our forensics accounting expertise across 3000+ stocks. We shine a light in the dark corners of SEC filings so our clients can make safer, more informed decisions.

Our stock rating methodology instantly informs you of the quality of the business and the fairness of the stock's valuation. We do the diligence on earnings quality and valuation so you don't have to.

In-depth risk/reward analysis underpins our ratings. Our rating methodology grades every stock, ETF, and mutual fund according to what we believe are the 5 most important criteria for assessing the quality of an equity. Each grade reflects the balance of potential risk and reward of buying that equity. Our analysis results in the 5 ratings described below. Very Attractive and Attractive correspond to a "Buy" rating, Very Dangerous and Dangerous correspond to a "Sell" rating, while Neutral corresponds to a "Hold" rating.

QUESTION: Why shouldn't fund research be as good as stock research? Why should fund investors rely on backward-looking price trends?
ANSWER: They should not.

Don't judge a fund by its cover. Take a look inside at its holdings and understand the quality of earnings and valuation of the stocks it holds. We enable you to choose the best fund based on its stock-picking merits so you do not have to rely solely on backward-looking technical metrics.

The drivers of our forward-looking fund ratings are Portfolio Management (i.e. the aggregated ratings of its holdings) and Total Annual Costs. The Total Annual Costs Rating (details here) captures the all-in cost of being in a fund over a 3-year holding period, the average period for all fund investors.

Our Philosophy About Research

Accounting data is not designed for equity investors, but for debt investors. Accounting data must be translated into economic earnings to understand the profitability and valuation relevant to equity investors. Respected investors (e.g. Adam Smith, Warren Buffett and Ben Graham) have repeatedly emphasized that accounting results should not be used to value stocks. Economic earnings are what matter because they are:

1. Based on the complete set of financial information available.
2. Standard for all companies.
3. A more accurate representation of the true underlying cash flows of the business.

Additional Information

Incorporated in July 2002, New Constructs is an independent publisher of investment research that provides clients with consulting and research services. We specialize in quality-of-earnings, forensic accounting and discounted cash flow valuation analyses for all U.S. public companies. We translate accounting data from 10Ks into economic financial statements, i.e. NOPAT, Invested Capital, and WACC, to create economic earnings models, which are necessary to understand the true profitability and valuation of companies. Visit the Free Archive to download samples of our research. New Constructs is a BBB accredited business and a member of the Investorside Research Association.

DISCLOSURES

New Constructs®, LLC (together with any subsidiaries and/or affiliates, "New Constructs") is an independent organization with no management ties to the companies it covers. None of the members of New Constructs' management team or the management team of any New Constructs' affiliate holds a seat on the Board of Directors of any of the companies New Constructs covers. New Constructs does not perform any investment or merchant banking functions and does not operate a trading desk.

New Constructs' Stock Ownership Policy prevents any of its employees or managers from engaging in Insider Trading and restricts any trading whereby an employee may exploit inside information regarding our stock research. In addition, employees and managers of the company are bound by a code of ethics that restricts them from purchasing or selling a security that they know or should have known was under consideration for inclusion in a New Constructs report nor may they purchase or sell a security for the first 15 days after New Constructs issues a report on that security.

New Constructs is affiliated with Novo Capital Management, LLC, the general partner of a hedge fund. At any particular time, New Constructs' research recommendations may not coincide with the hedge fund's holdings. However, in no event will the hedge fund receive any research information or recommendations in advance of the information that New Constructs provides to its other clients.

DISCLAIMERS

The information and opinions presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or solicitation of an offer to buy or sell securities or other financial instruments. New Constructs has not taken any steps to ensure that the securities referred to in this report are suitable for any particular investor and nothing in this report constitutes investment, legal, accounting or tax advice. This report includes general information that does not take into account your individual circumstance, financial situation or needs, nor does it represent a personal recommendation to you. The investments or services contained or referred to in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about any such investments or investment services.

Information and opinions presented in this report have been obtained or derived from sources believed by New Constructs to be reliable, but New Constructs makes no representation as to their accuracy, authority, usefulness, reliability, timeliness or completeness. New Constructs accepts no liability for loss arising from the use of the information presented in this report, and New Constructs makes no warranty as to results that may be obtained from the information presented in this report. Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information and opinions contained in this report reflect a judgment at its original date of publication by New Constructs and are subject to change without notice. New Constructs may have issued, and may in the future issue, other reports that are inconsistent with, and reach different conclusions from, the information presented in this report. Those reports reflect the different assumptions, views and analytical methods of the analysts who prepared them and New Constructs is under no obligation to insure that such other reports are brought to the attention of any recipient of this report.

New Constructs' reports are intended for distribution to its professional and institutional investor customers. Recipients who are not professionals or institutional investor customers of New Constructs should seek the advice of their independent financial advisor prior to making any investment decision or for any necessary explanation of its contents.

This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would be subject New Constructs to any registration or licensing requirement within such jurisdiction.

This report may provide the addresses of websites. Except to the extent to which the report refers to New Constructs own website material, New Constructs has not reviewed the linked site and takes no responsibility for the content therein. Such address or hyperlink (including addresses or hyperlinks to New Constructs own website material) is provided solely for your convenience and the information and content of the linked site do not in any way form part of this report. Accessing such websites or following such hyperlink through this report shall be at your own risk.

All material in this report is the property of, and under copyright, of New Constructs. None of the contents, nor any copy of it, may be altered in any way, copied, or distributed or transmitted to any other party without the prior express written consent of New Constructs. All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service marks of New Constructs.

Copyright New Constructs, LLC 2003 through the present date. All rights reserved.