

The Changes in Cash Flows from Operating Activities and Related Debt and Interest Coverage Ratios of Fortune 200 Companies – An Analysis of FASB’s Proposed Accounting Standards Update

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Abstract

Working under their goals of improving the understandability and usefulness of financial statements, the Financial Accounting Standards Board (FASB) issued a recent exposure draft. Its focus was to change the presentation of financial statements for not-for-profit entities as required in the Statement of Financial Accounting Standards No. 117. Among other things, FASB’s proposal required a change in classification of certain items within this statement. Our research extended FASB’s proposed changes in classification to for-profit entities. Specifically, we examined the reclassification of purchases and sales of long-lived assets from investing to operating activities of Fortune 200 companies. We examined the impact on cash flows from operating activities and on two cash flow ratios relating to debt and interest coverage. Our study revealed that including purchases and sales of long-lived assets makes these ratios more volatile. Thus, cash flow from operating activities becomes less valuable in predicting an organization’s financial health.

Keywords: FASB, Financial Accounting, Cash Flows, Interest Coverage

I. Introduction

Working under their goals of improving the understandability and usefulness of financial statements, the Financial Accounting Standards Board (FASB) issued the recent exposure draft, Proposed Accounting Standards Update (2015). A focus of this exposure draft was to change the presentation of financial statements for not-for-profit entities as required in the Statement of Financial Accounting Standards No. 117 (SFAS No. 117). Among other things, this proposal dealt with the Statement of Cash Flows, a mandatory part of issued financial reports detailing cash inflows and cash outflows during a reporting period. Along with requiring only the direct method of reporting cash flows from operating activities, the FASB proposal required a change in classification of certain items within this statement.

Kroehler said that the Proposed Accounting Standards Update led FASB board members to consider whether the same concepts should be extended to for-profit entities (Whitehouse, 2015). Whitehouse suggested, “A recent proposal to change the presentation of financial information for not-for profit entities, especially cash flow classifications, could serve as a preview of what might be in store for public companies down the line” (page 1). Thus, the update to SFAS No. 117 might be a prelude to a future FASB update making changes in Statement of Financial Accounting Standards No. 95 (SFAS No. 95). SFAS No. 95 establishes standards for cash flow reporting for public for-profit companies.

Our research extended FASB’s proposed changes in classification of the Statement of Cash Flows to for-profit entities. Specifically, we examined the change in classification of purchases and sales of long-lived assets from investing to operating activities and its impact on cash flows from operating activities and on two cash flow ratios relating to debt and interest coverage for Fortune 200 companies.

A. The Three-Part Classification of the Statement of Cash Flows

SFAS No. 95 (1987) and SFAS No. 117 (1993), respectively, require for-profit and not-for-profit entities to provide a cash flow statement for each period for which operating results are required. Similar requirements are applicable to enterprises following International Accounting Standards Board (IASB) IAS No. 7 (1992). The cash flow statement explains the change during the period in cash and cash equivalents, and classifies inflows and outflows relating to operating, investing and financing activities. While the objective of FASB is to provide accurate reporting metrics, many reporting issues persist that cloud the transparency of the Statement of Cash Flows. Specifically, limitations arise from inconsistent, and sometimes, ambiguous implementation of the three-part classification of cash inflows and outflows.

Under SFAS No. 95, cash flows for business entities are classified in the cash flow statements under three activities: operating, investing and financing. SFAS No. 117 for not-for-profit entities also requires the same three activities. For the most part, there are only slight differences between SFAS No. 117 and SFAS No. 95, relating to the classification of items as activities in this statement. Alderman and Mueller (2003) state that SFAS No. 117 provides little guidance on reporting cash flows beyond that offered in SFAS No. 95. However, one exception is that donor imposed restrictions may influence activity classifications for not-for-profit entities.

Operating activities include all transactions and events other than investing and financing activities. These activities generally relate to producing and delivering goods and providing services. Operating inflows include customer collections from the sales of goods and services, interest and dividend collections on debt and equity securities, and all other receipts not defined as investing and financing inflows. Operating outflows include interest payments, payments for inventories, payments to employees, payments to suppliers of other goods and services, payments to settle asset retirement obligations, payments to governments for taxes (if applicable), duties, fines and other fees, and all other payments not defined as investing or financing outflows.

The operating activities section of the Statement of Cash Flows is widely used by analysts to assess the financial health of an enterprise. For example, net income under accrual accounting may be an unreliable indicator of quality as it is based on various estimates to determine both revenue and expenses. Some analysts believe the focus on cash flow from operations rather than earnings provides a clearer picture of a company's abilities to generate cash as it strips away the accounting assumptions built into earnings. Furthermore, analysts can determine if an entity has a positive cash flow coming from the company's recurring activities, its operations. An entity can have positive cash flow because of selling off assets or issuing stocks and bonds. However, these activities are typically one-time gains in cash flow, and should not be considered an indicator of financial health.

In addition, a popular measure of financial performance, free cash flow, tells how much cash is left over from operations after capital expenditures. It is computed by subtracting capital expenditures from cash flow provided by operating activities (although there may be variations in calculating this financial measure). Analysts focus on free cash flow because it tells them how much cash an entity has to pursue future opportunities. Potential opportunities include developing new products or programs, making acquisitions, paying interest and dividends and reducing debt.

Investing activities include the acquiring and disposing of plant assets, other productive assets, and financial investments, and making loans to and collecting loans from other entities. Investing inflows include receipts from collecting or disposing of loans, receipts from sales of debt and equity instruments from other entities, and receipts from sales of plant assets and other productive assets. Investing outflows include the payments to make or acquire loans, payments to acquire debt or equity securities of other entities, and payments to acquire plant and other productive assets. A change in cash flow from the investing activities is the result of gains or losses from investments in the financial markets, and purchases and sales of capital assets, such as, plant and equipment.

Financing activities include obtaining resources from owners and providing them with a return on their investments, receiving resources that are donor restricted for long-term purposes, borrowing money and repaying the amounts borrowed, and obtaining and paying for other resources obtained from creditors for long-term credit. Financing inflows include proceeds from issuing debt and equity securities, proceeds from contributions and investment income that are donor restricted for long-term purposes, and proceeds from other short- or long-term borrowing. Financing outflows include dividend payments, outlays to reacquire or retire equity securities, repayment of amounts borrowed, and payments of debt issuance costs. Financing inflows include cash coming into an entity from creditors and stockholders.

B. Arbitrariness of the Three-Part Classification

SFAS No. 95 and SFAS No. 117 have many reporting issues due to their complexity and ambiguity. As mentioned above, these statements require a company to report cash flows in one of three categories: operating, investing, or financing activities. While most cash flow transactions can only be classified under one of the three categories, there are some that are less clear. Nurnberg (2009) said, “A major problem with the SFAS-95 three-way classification of cash flow as operating, investing, and financing is its inherent arbitrariness” (page 32). There have been numerous disagreements and discussions on how to reduce the ambiguity in SFAS No. 95 and SFAS No. 117. However, very little has been done to strengthen reporting standards, as many issues still exist.

For example, SFAS No. 95 reporting has appeared arbitrary to some researchers on how dividends and interest outflows/inflows should be listed. According to Bao and Romeo (2012), an example of this is when dividend income derives from investments yet gets reported in the operating section of the cash flow statement. Allowing dividends received only as part of the operating section in the cash flow statement could cause distortions while allowing entities to manipulate their numbers. Another issue is how entities classify financing sources. According to Wampler, Smolinski, and Vines (2009), if a company uses debt as a financing source, it can then classify the interest paid as an operating activity. However, a company that uses equity as a financing source treats paid dividends as a financing activity. It should be noted that under IASB No. 7 (1992) dividend payments might be classified as either financing or operating outflows. Similarly, under IASB No. 7 (1992), interest payments may be classified as operating, investing, or financing outflows of non-financial companies, and as either operating or financing outflows of financial companies. Nurnberg (2009) suggested that IASB classification rules are more flexible than FASB rules to achieve acceptance across countries with different classification rules under their own financial national accounting standards.

Another problem area is the way different marketable securities (debt and equity) can be treated. For example, trading securities are always under operating activities while available-

for-sale securities go under investment activities (Weiss and Yang, 2007). The controversy is that companies have flexibility to move from operating to financing, and from financing to operating since companies have the easy ability to classify different equity and debt securities as either trading or available-for-sale. The same issue applies to accounts receivable. If a company sells accounts receivable, the proceeds go under the operating section. However, if a company were to borrow money and accounts receivables acted as collateral for the borrowed money, the borrowed money goes under financing activities (Weiss and Yang, 2007).

Classification issues also exist relating to the purchase and sale of inventory and plant assets for for-profit and not-for-profit entities. In his research monograph, Heath (1978) said that the purchase and sale of inventories is in one sense fundamentally the same as the purchase of plant assets. Both are usually considered part of the normal operating activities of a business, and as a result, both might be viewed as operating activities. However, in the statement of cash flows, activities relating to the former are classified as operating cash inflows, outflows whereas activities relating to the latter are classified as investing cash inflows, and outflows.

C. FASB's Proposed Accounting Standards Update

The recent FASB exposure draft, Proposed Accounting Standards Update (2015) focused on changes made to the presentation of financial statements for not-for-profit entities as required in SFAS No. 117. FASB (2015) said that its new proposal would be an improvement over the current guidance under GAAP (page 4). Among other things, the proposal dealt with the reclassification of certain items within the Statement of Cash Flows. This included changing the purchase and sale of long-lived assets for operating purposes (property, plant and equipment or PPE) from investing to operating activities; changing cash dividends and interest income from operating to investing activities; and changing cash payment of interest expense from operating to financing activities. FASB (2015) concluded that reclassifying items reported in the Statement of Cash Flows would increase understandability and help better communicate financial performance (page 6). In addition, Jim Kroeher, FASB Vice President, clarified FASB's new position relating to moving the acquisition and sale of property, plant and equipment from an investing to an operating activity. He stated that by doing this, FASB was pursuing a cohesive principle. That is, since depreciation of PPE is an operating expense and part of operating activities, then the acquisition and sale of PPE should be an operating activity as well (Whitehouse, 2015).

II. Research Design and Findings

A. Research Design

The purpose of our research was to project the changes on the Statement of Cash Flows if the FASB proposal for not-for profit entities was extended to for-profit entities. Our research focused on reclassifying property, plant and equipment purchases and sales (Net PPE) from investing to operating activities. We chose Net PPE because of its size relative to the other items that would be subject to reclassification.

Our sample consisted of the Fortune 200 companies. We collected the following cash flow related items from their financial statements from 2012 to 2015: Cash Flow from Operating Activities (Old OCF), Purchases of Fixed Assets (PPE Purchases) and Sale of Fixed Assets (PPE Sales). Our new Cash Flow from Operating Activities (New OCF) was determined by combining Net Fixed Assets Purchases with Old OCF (Equation 1 and 2).

$$\text{New OCF} = \text{Old OCF} + \text{Net Fixed Assets Purchases} \quad (1)$$

$$\text{Net Fixed Assets Purchases} = \text{PPE Purchases} - \text{PPE Sales} \quad (2)$$

We compared the resulting dollar changes from the Old to the New OCF as well as the changes in two cash flow related ratios, the Debt Coverage Ratio and the Interest Coverage Ratio (Equations 3 and 4).

$$\text{Debt Coverage Ratio} = \frac{\text{Cash Flow from Operating}}{\text{Total Debt}} \quad (3)$$

$$\text{Interest Coverage Ratio} = \frac{\text{Cash Flow from Operating} + \text{Interest Expenses}}{\text{Interest Expenses}} \quad (4)$$

In addition, our sample included companies from 14 different industries. Companies from different industries have different PPE purchases and sales patterns. For example, typically companies in the service and finance industries do not have the same magnitude of PPE purchases and sales as companies in the manufacturing and transportation industries. Our analysis focused on four industries: (1) Retail Trade, (2) Finance, (3) Manufacturing and (4) Transportation.

B. Findings

Table I (Appendix) presents the overall T-test results from 2012 to 2015 on all industry data. We performed T-tests between original and new data on Cash Flow from Operating Activities, Debt Coverage Ratio, and Interest Coverage Ratio. Our t-test null hypothesis H_0 is that there is no material difference on the Cash Flow from Operating Activities and the two related ratios; while our t-test alternative hypothesis H_a is that there is material difference. The smaller the p-value, the more evidence there is in favor of the alternative hypothesis. According to the results, the p-value is relatively small (most of the results are smaller than 0.05). Therefore, the null hypothesis is rejected and we have confidence to say that there is a material difference between the original data and the new data.

By breaking down all data into years, we have Table II to V (Appendix). Outlier is defined if the PPE is over 500% from previous year to current year.

On average, PPE net changes are 47%, 50%, 40%, and 48% of Cash Flows from Operating Activities (old) in Year 2015, 2014, 2013, and 2012, respectively. These percentages suggest that PPE will be a big component of Cash Flows from Operating Activities if FASB reclassifies PPE net purchases and sales from investing to operating activities. From Table II to Table V, we can see that all p-values, after removing outliers from the data, are significant which means that the new data is materially different from the old data.

In summary, our annual analysis for Fortune 200 companies demonstrates that, if FASB were to require companies to classify net PPE purchases and sales as part of operating cash flows, net PPE purchases and sales would become a large component of Cash Flows from Operating Activities. This is shown in the average percentage change. We saw significant changes in companies' New OCF from Old OCF as evidenced by significant p-values of paired T-tests. This supports our alternative hypothesis that material differences exist.

Next, we conducted separate analyses for each industry with enough observations. Four industries were identified: (1) Retail Trade (2) Finance, (3) Manufacturing, and (4) Transportation & Utility. Paired t-tests were run for each year within each of the four industries.

Tables VI to VIII (Appendix) shows t-tests results by four industries. Our t-test null hypothesis H_0 is that there are no material differences of Cash Flows from Operating Activities and the two related ratios among the industries. Our t-test alternative hypothesis H_a is that there are material differences. According to the results, the null hypothesis is rejected for some industries, but not for others. FASB's reclassification would have different impacts on companies in different industries. For example, the T-tests indicate that there is a smaller impact on companies in the Finance industry than in the other three.

III. Conclusions and Suggestions for Future Research

The FASB Board suggested that it might consider extending the Proposed Accounting Standards Update from not-for-profit to for-profit entities. Thus, the update to SFAS No. 117 may influence FASB to make similar changes in SFAS No. 95. We believe our study is valuable because it provides insights on for-profit entities relating to the possible effects of reclassification of Net PPE purchases and sales from investing to operating activities in the Statement of Cash Flows.

Financial statements are historical in nature and analysts use historical and current information to develop trends to predict the future. Cash flow from operating activities, including cash flow ratios relating to debt and interest coverage, are measures widely used to assess an organization's financial health. However, our study shows that including Net PPE purchases and sales in cash flows from operating activities makes these measures more volatile. Thus, cash flow from operating activities becomes less valuable in predicting an organization's financial health.

This study focuses on the reclassification of Net PPE purchases and sales from investing to operating activities. Future studies can analyze the impacts of the other proposed reclassifications. In addition, the Proposed Accounting Standards Update (2015) focuses on not-for-profit entities. A useful research question might be whether the existing Statement of Cash Flows used by public for-profit companies provides enough information for it to be useful to investors and creditors for valuation purposes.

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Appendix

Table 1. T-test for all industry from 2012 to 2016

	2015	2014	2013	2012
T-test (CFO)	0.0009522404	0.0000000374	0.0000002463	0.0000002617
T-test (Debt Coverage Ratio)	0.0000001315	0.0000000815	0.0743865773	0.0000000000
T-test (Interest Coverage Ratio)	0.0000000095	0.0000851940	0.0000282845	0.0000000110

Table 2. T-test for 2015 with and without outliers*

	With Outliers	Without Outliers
T-test (CFO)	0.0009522404	0.0003474460
T-test (Debt Coverage Ratio)	0.0000001315	0.0000001301
T-test (Interest Coverage Ratio)	0.0000000095	0.0000000094

* Fannie Mae, Safeway and Supervalu are removed as outliers because these three companies have PPE over 500% and/or significant volatility in operating cash flows from 2012 to 2015.

Table 3. T-test for 2014 with and without outliers

	With Outliers	Without Outliers
T-test (CFO)	0.0000000374	0.0000000003
T-test (Debt Coverage Ratio)	0.0000000135	0.0000000138
T-test (Interest Coverage Ratio)	0.0000851940	0.0000849433

Table 4. T-test for 2013 with and without outliers

	With Outliers	Without Outliers
T-test (CFO)	0.0000002463	0.0000002463
T-test (Debt Coverage Ratio)	0.0743865773	0.0743865773
T-test (Interest Coverage Ratio)	0.0000282845	0.0000282845

Table 5. T-test for 2012 with and without outliers

	With Outliers	Without Outliers
T-test (CFO)	0.0000002617	0.0000000000
T-test (Debt Coverage Ratio)	0.0000000000	0.0000000000
T-test (Interest Coverage Ratio)	0.0000000110	0.0000000108

Table 6. T-test for OCF by industry (without outliers)

	Finance, Insurance, Real Estate n = 36	Transportation & Utilities n = 28	Manufacturing n = 76	Retail Trade n = 27
2015	0.0290046995	0.0001315319	0.5664384755	0.0108217159
2014	0.0943527245	0.0000144363	0.0001554668	0.0060195958
2013	0.0322939120	0.0000726218	0.0000000156	0.0060701264
2012	0.0220076213	0.0001215978	0.0000066606	0.0058631183

Table 7. T-test for Debt Coverage Ratio by industry (without outliers)

	Finance, Insurance, Real Estate n = 36	Transportation & Utilities n = 28	Manufacturing n = 76	Retail Trade n = 27
2015	0.1687374894	0.0000019033	0.0000000263	0.1106493607
2014	0.2870591914	0.0000001030	0.0000004480	0.0789835578
2013	0.3148811874	0.0000039582	0.2310305266	0.1173993627
2012	0.2780094261	0.0020710245	0.0000000310	0.0129068533

Table 8. T-test for Interest Coverage Ratio by industry (without outliers)

	Finance, Insurance, Real Estate n = 36	Transportation & Utilities n = 28	Manufacturing n = 76	Retail Trade n = 27
2015	0.0041100353	0.0000258385	0.0002878134	0.0014045303
2014	0.0310566780	0.0000011533	0.0228311388	0.0004742039
2013	0.0015073398	0.0006268774	0.0031849498	0.1240344445
2012	0.0006613701	0.0161075546	0.0014740714	0.0015150013