CLAY TOKENS

The Uniform Accounting Monthly Report | February 28, 2022

Deficiencies in GAAP/IFRS vis-a-vis Uniform Accounting

Presented to the UAFRS Advisory Council

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GAAP has conflated capital investments with cash expenses

The primary focus of investors can be summarized by one word: returns.

Namely, investors would love to know how much of a return they will make on the capital they invested in a given investment. Of course, this is all but impossible in practice. Instead, investors often must settle for looking back at the returns they have made.

This focus on returns translates to how many investors analyze companies. While they are always interested in the returns they will make with their investment in a company, it is also critical to understand the returns that a business has been able to generate with its capital.

In fact, return on invested capital is one of the most popular methods of analyzing the profitability of a company.

When people think about the word “capital,” external sources of capital come to mind, whether it be equity from shareholders or debt from banks. However, an important part of invested capital is often overlooked… even though it has “capital” right in its name.

And that is working capital.

(Net) working capital, or the difference between current assets and current liabilities, takes on an important role in understanding a company's true financial position.

Working capital provides a helpful measure of a company’s current liquidity, operational efficiency, and short-term financial health. It can also be used to gain a general impression of the ability of company management to utilize assets in an efficient manner.

High working capital means that a company is tying up significant cash in their operating balance sheet, and they are therefore left with less cash to invest in and grow the business or to return to shareholders.

In contrast, if a company’s current assets do not exceed its current liabilities, it may be dealing with some issues. These issues could lead to challenges growing the business or paying back creditors, including bankruptcy in a worst case scenario.

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Accordingly, some of the most well respected investors of all time include working capital as an important factor in their investment analysis.

Seth Klarman, the founder of Baupost Group, and affectionately known as the “Oracle of Boston,” a hat tip to Warren Buffet’s nickname, stated that “formulas such as the classic ‘net working capital’ test are necessary to support an investment analysis.”

And while incredibly successful, Klarman is by no means a pioneer in his focus on working capital. Discussion of the topic can be traced back far before…. including to a man off which Klarman’s investment philosophy draws heavily from.

Ben Graham, widely known as the “ Father of Value Investing” and a staunch critic of accounting standards noted all the way back in 1937, in his landmark book, The Interpretation of Financial Statements, that “buyers of securities in general pay little attention [to] the balance sheet as a whole except as regards [to] the working capital position.”

Even for these investors who disregard as-reported financial statements, working capital seems to be a critical indicator of potential success for a firm.

Working capital is an important part of operations as it involves managing payments with customers, suppliers and employees. If working capital is managed correctly, the business can expedite payments owed to it, and defer the payments it owes, to a point where suppliers and customers are basically financing current operations.

Although GAAP has many shortcomings, even the standard setters at FASB seemed to understand that analyzing working capital is important, and build the financials as such. That said, we can’t give them too much credit as they completely mishandled its accounting in financial statements.

In GAAP, changes to working capital accounts are treated as operating cash flows in the statement of cash flows. The issue of course is that putting those changes in operating cash flows misses a key hint on where those swings should go. After all, it is changes in working *capital*, it should show up as changes in the capital activities of the business.

But when the firm sees an increase in working capital, such as inventory, it is recognized as a negative operating cash flow. GAAP penalizes companies for essential investments in the business.

For example, let’s say we provide a lemonade company $200 during its first year of operations. With those funds, the company purchases $100 worth of fixed capital in the form of a lemonade stand and $100 of working capital, in the form of lemons and sugar.

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At the end of the year, the business is holding onto all of those assets in order to gear up for the next year of sales.

According to the statement of cash flows, the business has already lost $100 in its operations. It treats investing in inventory as a negative operating cash flow.

The issue becomes apparent because no lemonade was sold at a loss and no expenses were incurred by the business. As a matter of fact, neither analysts nor management would think poorly of the business because purchasing inventory is part of the capitalization of its business.

The GAAP distortions continue to year two of the company. If the company sold all of its inventory at cost, rather than at a profit, it would still see cash flows from operations of $100. The financial statements would convey that it was a good year operationally; however, any reasonable investor would disagree with this sentiment because no profit was realized.

In this case, the $100 of positive operating cash flow was simply a reduction in invested capital. The “operations” of the business generated no positive cash flow as the cost of goods sold matched revenues.

In GAAP, working capital is treated like an expense, just like an employee’s salary. But really it should be treated as invested capital.

This may partly explain why inventory is called “working capital.” No one calls it “working expenses” or “working expenditures.”

Under Uniform Accounting, when we talk about “capital,” we are referring to the company’s Uniform Assets. Uniform return on invested capital is the same as Uniform return on assets in that regard.

Working capital is an important investment in the company’s operations, as such we need to include it as part of operating assets.

Current assets alone should not be on the balance sheet because it inflates the value of operating invested capital. Rather, we also need to include the current liabilities, which are often times financing those current assets, to get a clearer picture of the core of the business.

Once we do, we can see which company is best at unlocking value through not just long term investments but short term operational expertise.

There is a long line of firms, from various sectors, where as-reported assets do not represent economic reality due to the misrepresentation of working capital in the operating asset base.

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This month we highlight three companies wherein the inclusion of current assets without adjusting for current liabilities severely limit the reliability of the firm's reported asset-based ratios:

- HP, a leading computer hardware manufacturer
- CME Group, the world's largest financial derivatives exchange; and
- Costco, a leading membership-only big box retailer

In the pages and charts below, we show the current assets, current liabilities, and working capital for these firms and the difference between as-reported GAAP Assets and UAFRS-based Assets.

While all of the 130+ adjustments have been applied, we hone in on how this line item in particular can create material deviations from economic reality.

In each case shown below, it's quite obvious the stock market does not and has not valued firms on GAAP earnings.

These examples highlight just how bad the as-reported numbers are, from a database of more than 32,000 companies wherein Uniform Accounting and GAAP/IFRS accounting differences are shown.

The report name "Clay Tokens" comes from the earliest known form of accounting and bookkeeping and a foundation for tracking the earliest debits and credits. In this regard, Uniform Accounting is an attempt to get financial statements back to the foundations of the purpose of accounting… to be useful to the users of the accounting information. Clay Tokens is produced monthly by Valens Research on behalf of and for the UAFRS Advisory Council for Uniform Adjusted Financial Reporting Standards.

HPQ – HP, Inc.

Since its 2017 spinoff of Hewlett Packard Enterprise, HP has seen material and steady improvements in its profitability. (Exhibit 1a).

Reflecting this UAFRS-based earnings trend, the firm has seen a material appreciation in its stock price, showcasing how a tailored focus on core businesses has been accretive to the firm's performance.

Meanwhile, GAAP earnings have remained largely flat over this same time period, misleading investors into believing the firm has been unable to extract new value from its business. This as-reported performance would suggest the firm's stock price rise has been wholly unwarranted.

Since 2017, **HPQ** share prices have increased materially in value, rising from approximately $15/share to nearly $40/share, an over 150% rise (Exhibit 1b). That said, according to as-reported metrics, **HPQ** appeared to be a firm with middling and generally flat profitability, remaining just below corporate average levels. This supposed uninspiring performance should not warrant the firm's stock price materially positive movements.

However, using Uniform Accounting, we can identify distortions such a lack of consideration of the impact of working capital on the operating balance sheet of a firm, which substantially suppresses profitability metrics (Exhibit 1c).

UAFRS-adjusted metrics paint a significantly different picture of **HPQ**, where Uniform ROA improved from 27% in 2017 to 65%+ levels through 2021, more than doubling, suggesting that the healthy appreciation in the firm's stock price has likely been justified.

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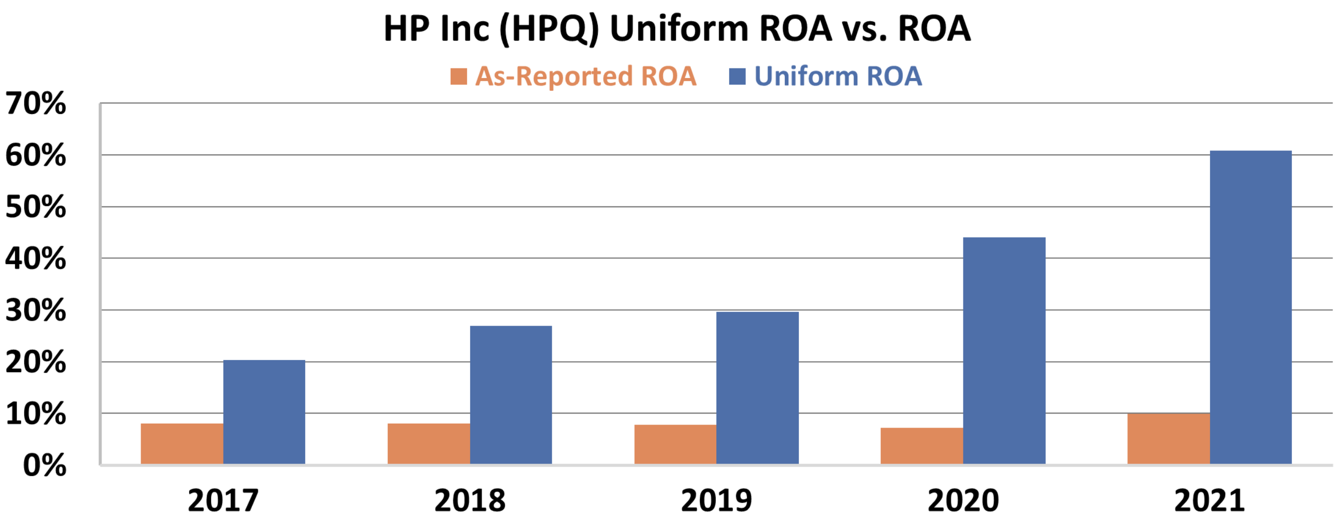
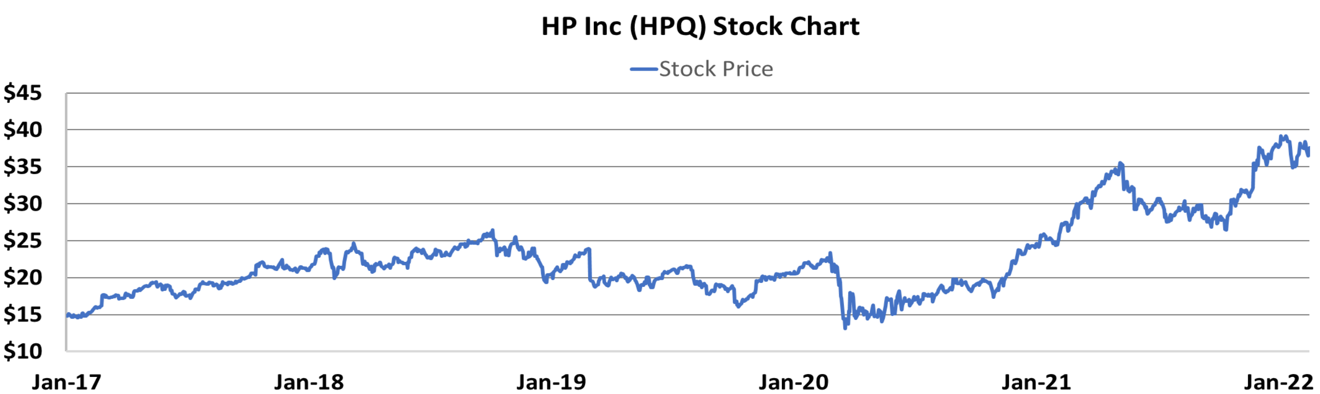
Deficiencies in GAAP/IFRS vis-a-vis Uniform Accounting

Exhibit 1a



Sources: UAFRS, CaptialIQ

Exhibit 1b



Source: CapitalIQ

Exhibit 1c

HPQ - HP Inc.	2016	2017	2018	2019	2020	2021
Uniform Current Assets	16292.3	18609.1	20451.6	20177.0	20370.0	22170.0
Uniform Current Liabilities	19642.0	22306.0	24720.0	26054.0	26391.0	28787.0
Uniform Net Working Capital	(3349.7)	(3696.9)	(4268.4)	(5877.0)	(6021.0)	(6617.0)
Uniform Net Assets	11933.2	9853.3	7700.2	5080.0	5762.1	7509.6
Total Assets	28987.0	32913.0	34622.0	33467.0	34681.0	38610.0
% Variance	142.9%	234.0%	349.6%	558.8%	501.9%	414.1%
Uniform ROA	20.3%	27.0%	29.7%	43.9%	61.6%	65.8%
As-Reported ROA	3.6%	8.1%	8.0%	7.8%	7.3%	9.9%
Uniform ROA vs ROA - Variance	16.7%	18.9%	21.7%	36.1%	54.4%	55.9%

CME – CME Group, Inc.

Over the past few years, following years of volatility, CME Group has seen a significant improvement in its operating profitability (Exhibit 2a).

To accompany this, since the start of 2018, the firm's stock price has been on an impressive streak, generally moving in the same direction as its Uniform-calculated earnings.

Meanwhile, GAAP earnings shows a firm that has paltry and declining profitability in recent years. This lowly performance fails to explain the firm's solid stock price movements, displaying how current accounting standards enable a dislocation between economic reality and as-reported performance.

Since 2018, **CME** shares have seen material appreciation, rising from approximately $150/share to almost $240/share, an over 60% increase (Exhibit 2b). That said, according to as-reported metrics, **CME** appeared to be a firm which saw weak and fading profitability, with as-reported ROA falling from 2% levels in 2015-2019 to just 1% in 2020. This does not appear to be a firm with strengthening fundamentals that would justify the company's stock outperformance.

However, using Uniform Accounting, we can identify distortions such a lack of consideration of the impact of working capital on the operating balance sheet of a firm, which substantially suppresses profitability metrics (Exhibit 2c).

UAFRS-adjusted metrics paint a significantly different picture of **CME**, where Uniform ROA substantially improved over the same time frame, expanding its profitability from an already robust 33% in 2018 to 65%+ levels in 2020. This earning trend justifies the firm's stock price improvement.

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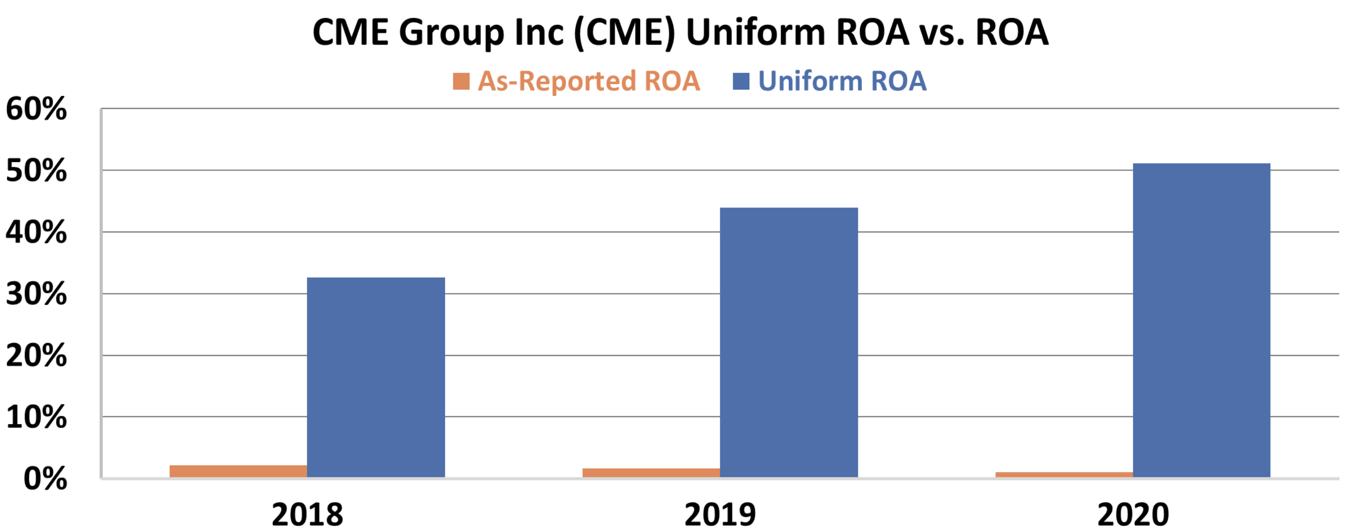
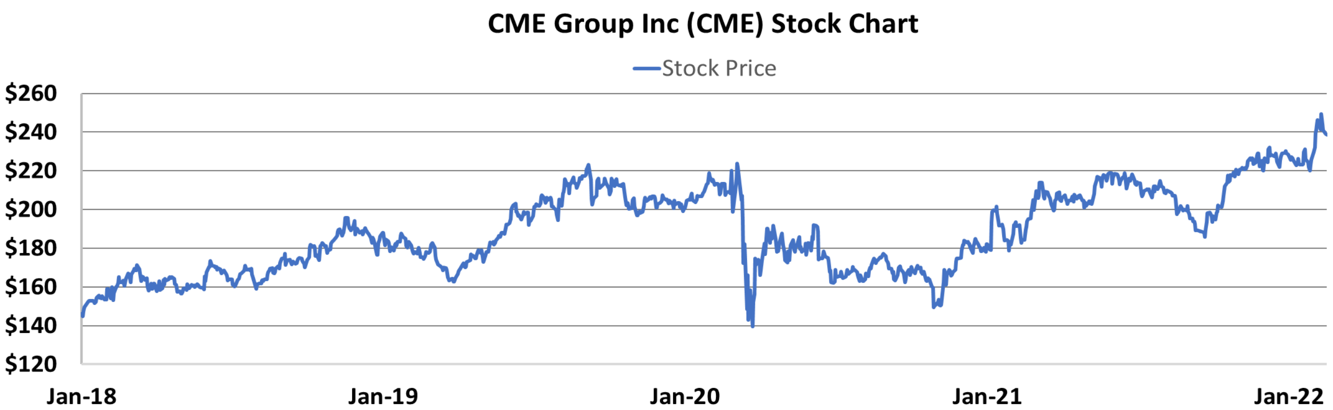
Exhibit 2a



Sources: UAFRS, CaptialIQ

Exhibit 2b



Source: CapitalIQ

Exhibit 2c

CME - CME Group Inc.	2015	2016	2017	2018	2019	2020
Uniform Current Assets	36305.7	38259.4	45095.0	40654.8	38278.6	87967.5
Uniform Current Liabilities	36824.5	38945.6	45672.9	40698.4	38472.8	88145.7
Uniform Net Working Capital	(518.8)	(686.2)	(577.9)	(43.6)	(194.2)	(178.2)
Uniform Net Assets	3086.9	2711.4	2710.4	3842.4	4143.2	3211.4
Total Assets	69369.4	75791.2	77475.7	75215.3	124659.6	196780.3
% Variance	2147.2%	2695.3%	2758.5%	1857.5%	2908.8%	6027.6%
Uniform ROA	40.8%	52.3%	39.6%	32.6%	43.9%	67.4%
As-Reported ROA	2.0%	2.0%	2.2%	2.2%	1.7%	1.0%
Uniform ROA vs ROA - Variance	38.8%	50.3%	37.4%	30.4%	42.2%	66.4%

COST – Costco Wholesale Corporation

For years, Costco had been a name which saw steady improvements in profitability, before seeing a massive boost in 2021 on the heels of COVID household spending waves (Exhibit 3a).

The firm's stock price has reflected this strength in Uniform-calculated earnings through the pandemic, and even in the years prior, the firm had seen significant appreciation over previous historical highs.

Meanwhile, GAAP earnings have remained stagnant over this same timeframe, showcasing a firm that seems to have maintained consistent, lackluster profitability over the past 5+ years. These earnings figures distort the economic reality of the firm's performance.

Since the start of 2018, **COST**'s share price has seen an impressive rise, climbing from approximately $190/share to over $510/share, representing about a 170% appreciation in value (Exhibit 3b). Yet, according to as-reported metrics, **COST** is a firm that likely warranted limited stock price movement due to stagnant profitability, with ROA ranging from 7%-8% since 2016. As-reported metrics do not show a firm that has managed to strengthen its already impressive performance.

However, using Uniform Accounting, we can identify distortions such a lack of consideration of the impact of working capital on the operating balance sheet of a firm, which substantially suppresses profitability metrics (Exhibit 3c).

UAFRS-adjusted metrics paint a significantly different picture of **COST**, where Uniform ROA rose considerably from 13%-14% levels in 2018-2019 to 17% in 2021. These Uniform metrics better explain the rationale behind the firm's substantial stock price appreciation.

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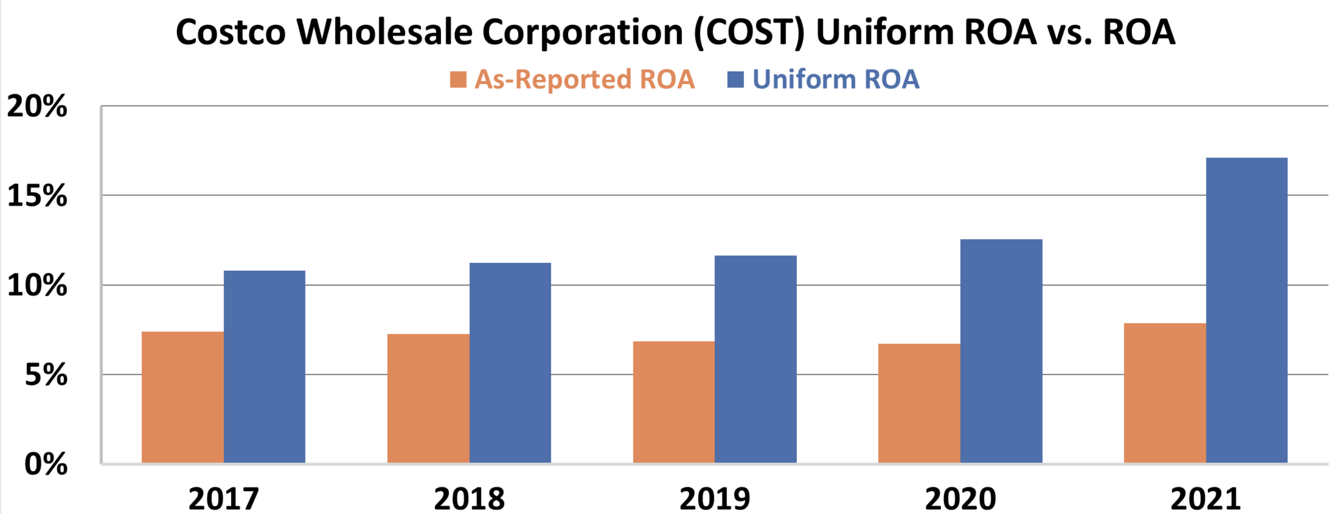
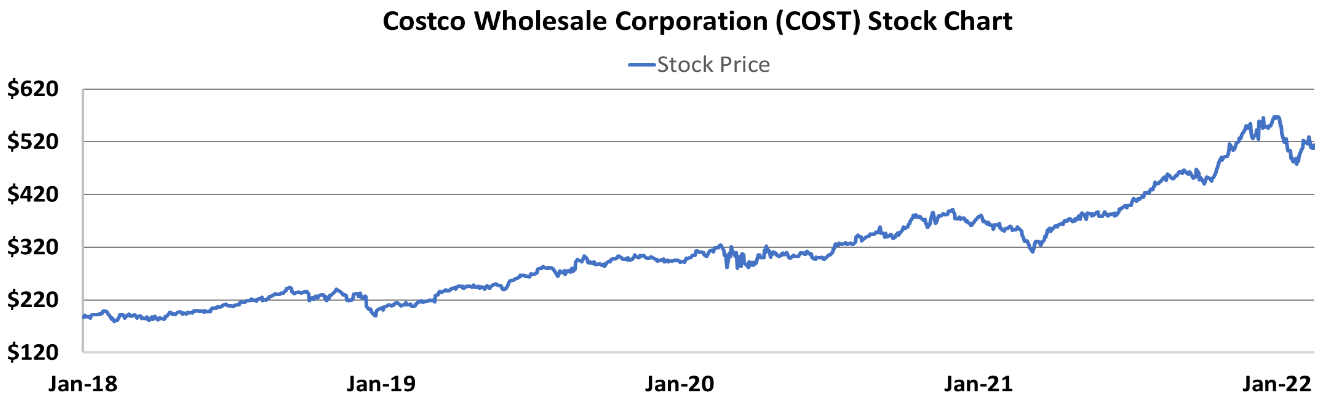
Exhibit 3a



Sources: UAFRS, CaptialIQ

Exhibit 3b



Source: CapitalIQ

Exhibit 3c

COST - Costco Wholesale Corporation	2016	2017	2018	2019	2020	2021
Uniform Current Assets	15218.0	17317.0	20289.0	23342.0	24954.0	29106.1
Uniform Current Liabilities	14475.0	17409.0	19836.0	21487.0	24487.0	28348.0
Uniform Net Working Capital	743.0	(92.0)	453.0	1855.0	467.0	758.1
Uniform Net Assets	22994.9	23994.2	26595.7	29453.0	30976.9	34968.7
Total Assets	33163.0	36347.0	40830.0	45400.0	55556.0	59268.0
% Variance	44.2%	51.5%	53.5%	54.1%	79.3%	69.5%
Uniform ROA	12.0%	12.9%	13.3%	13.7%	14.6%	17.1%
As-Reported ROA	6.9%	7.4%	7.3%	6.9%	6.7%	7.9%
Uniform ROA vs ROA - Variance	5.1%	5.6%	6.0%	6.8%	7.8%	9.2%

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Definitions

Uniform Net Assets **–** Net Asset’ is calculated as Net Working Capital + Long Term Non-Depreciating Operating Assets (including Land and Non-Depreciating Operating Intangible Assets, excluding Goodwill and other acquisition-related Intangible Assets) + Inflation-Adjusted Net PP&E + Net capitalized R&D + Net Capitalized Leases + Net Depreciating Operating Intangible Assets

Uniform ROA – UAFRS-adjusted ROA is a cleaned up Return on Asset ratio, used to understand the operating fundamentals of the company. UAFRS-adjusted ROA is Earnings’ divided by Asset’.

Uniform Earnings is calculated as Net Income + Special Items + Interest Expense + Depreciation and Amortization Expense + R&D Expense + Rental Expense + Minority Interest Expense + Pension Charges + LIFO to FIFO adjustments + Stock Option Expense + Purchase Accounting Cash Flow Adjustments - Non-Operating (Investment) Income - Asset Life Based Charge on Depreciating Assets. Asset' is Net Asset’, or Net Working Capital + Long-Term Non-Depreciating Operating Assets (including Land and Non-Depreciating Operating Intangible Assets, excluding Goodwill and other acquisition related Intangible Assets) + Inflation Net PP&E + Net Capitalized R&D + Net Capitalized Leases + Net Depreciating Operating Intangible Assets.