Dissecting Financial Statements: An Example

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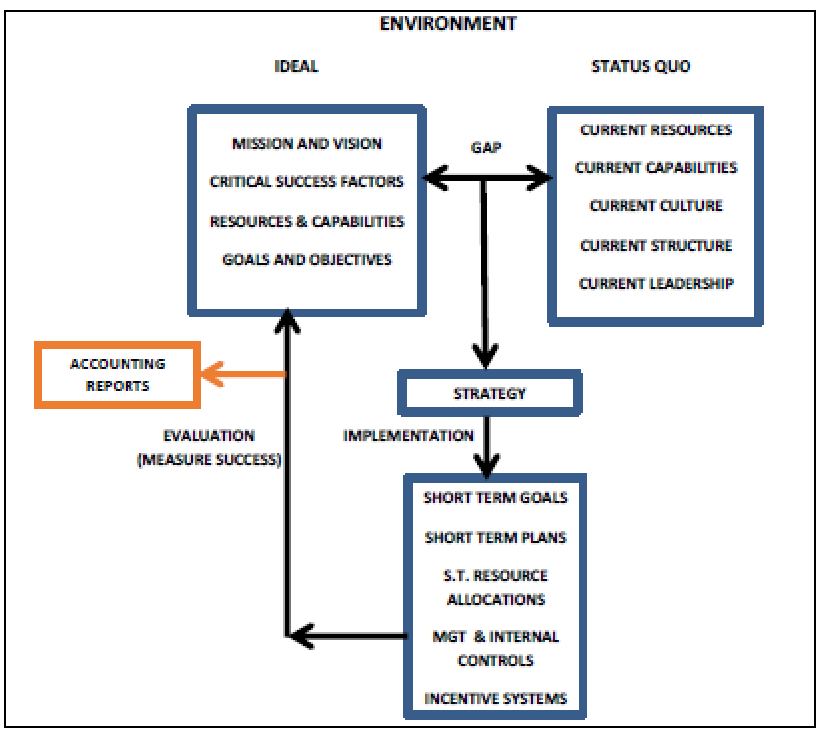
Reading and analyzing financial statements can be a challenging task. Firms use different options to report on similar transactions, account titles may vary across statements, the manner in which material information is presented and where exactly it appears in the annual report can vary, and the modern firm is a complex combination of operational, investing and financial decisions making it an unstable moving target. Analysis isn't easy and to do it seriously and correctly one needs to practice a lot.

We have always found it useful to emphasize that debits and credits, t-accounts and journal entries are not just necessary evils in the recording of transactions in the process of preparing statements, but to stress the utility of these basic constructs in the process of reverse engineering the statements—doing analysis. Good analysis depends on knowing where in the statements to look for information, how to use articulation and double entry as an aid to finding things, and how to know if something you think you can conclude, is actually correct. In the example in this note we will show how t-accounts, debits, credits, and journal entries can aid and abet this process.

A few more general comments before we move on to the example.

Reading and Analyzing Financial Statements: Context

Accounting reports are jam-packed with numbers. But good analysis of financial statements is not about what the numbers are, rather what they mean. And to be sure, there is no meaning without context. Context is about the environment the entity lives in and what it is trying to accomplish in that environment. See the figure to the left. Without going into great detail, an intelligent reader of a financial statement will know what the entity would like to be when it "grows up" (ideal), where it is now (status quo), what resources of all types it has now and what resources it needs going forward and what it needs to do particularly well to get there. Of course you should know what its strategy is and



what its short term goals are as steps to an implementation of that strategy. All of this activity is captured in the numbers in accounting reports. Internal management uses this information to refine its "ideal", to understand how environmental changes impact what it is doing and should be doing, and to adapt its behavior going forward. An intelligent reader uses the accounting numbers to try to surmise what is going on "in the loop". To do this well, the reader needs to not only understand context, but also needs to understand the accounting rules, conventions and methodologies that went into the construction of the numbers in the financial statements.. All this is necessary to meaningfully map the accounting numbers correctly back on to the economic activities of the entity. And as we indicated earlier, debits, credits, t-accounts and journal entries can be very helpful tools in this process.

As we shall see, depending on one's objectives in looking at the statements in the first place, we may not have to understand everything in gory detail. For instance, a banker considering a loan to a company will have to assess operational and environmental issues but will be particularly interested in the nature and composition of the current debt structure of the company in order to assess the risks it might face and what the terms of a loan should be given the risk it will be taking on.

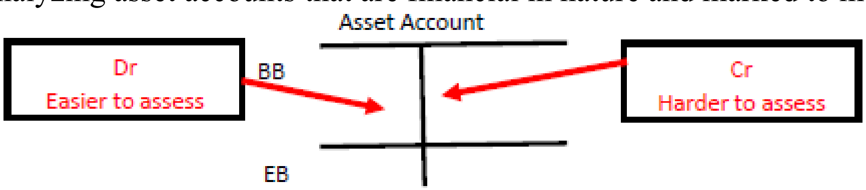
Reading and Analyzing Financial Statements: Articulation

Financial statement analysis is the art of combining knowledge of an entity and the context and environment in which it operates with an understanding of how accounting numbers and financial statements are constructed, to gain insight into the financial well-being and performance of the entity. A key skill in this process is a deep understanding of articulation—how statements of financial position, activities, and cash flows interrelate.

Crucial accounting measurements in any entity are how it generates and consumes cash and how it applies the accrual concepts of revenues, expenses, gains and losses to measure the creation of wealth (net income) in a for-profit or to monitor changes in net assets in a nonprofit. How these two measures relate to one another is important in understanding how the entity is doing financially and operationally. As well shall see, the indirect method cash flow statement can provide deep insights into how cash flow and accrual numbers interrelate. The footnote to the statement of cash flows which lists noncash transactions can be very helpful in understanding the underlying economic events that caused the statements to be what they are.

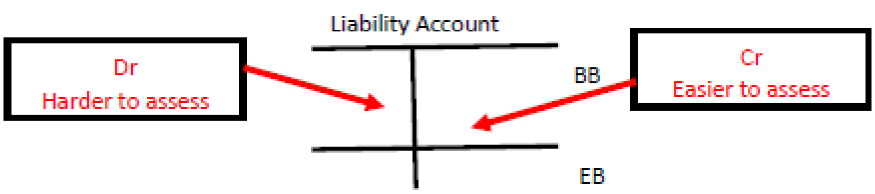
We have found that the basic t-account can be very helpful when attempting to understand the economics of aspects of the transactions and activities reported on in the financial statements. Good analysis can help us read beyond the numbers to discern items of interest. Reading financial statements with an eye toward extracting information from them is all about articulation and knowing where to look for numbers and explanations. Oftentimes simple sets of t-accounts can be a convenient way to summarize information and to keep order in an analysis. Before giving a few examples let us make several general observations. Consider a basic asset account. The beginning and ending balances can be found in the statement of financial position. We know that most asset accounts increase by the cost of the asset when it is purchased for cash.

Now where do we look for cash purchases of assets? Of course, the investing section of the cash flow statement is the first place to look. This cash outflow for the purchase can be directly entered as a debit in the t-account. But not all fixed assets are acquired for cash. Another obvious place to look for increases would be in the supplemental noncash transaction information footnoted in the cash flow statement (for example, the acquisition of a fixed asset via a lease, the contribution of a fixed asset to a non-profit entity). And a third item to look for when analyzing asset accounts that are financial in nature and marked to market (e.g. an endowment or investment account) would be the activities statement or more reliably the indirect method cash flow statement as an adjustment item in the cash flow from operations section for the amount of the write-up or write-down (could be a debit or credit).



It turns out that the credit (decrease) side of the asset account is slightly more difficult to explain. If I look in the cash flow statement (investing section) for the proceeds from sale of the asset (assuming there was one) we do not necessarily observe the amount to be taken out of the asset account. The asset might have been sold for more or less than its book value (have an associated gain or loss) and therefore the proceeds from sale must be adjusted by the gain or loss to determine the amount taken out of the asset account. Where to find the gain or loss? Most reliably it can be found as an adjustment to the change in net assets to arrive at cash flow from operations in the indirect method cash flow statement. The amounts of write-offs of assets can also be found there as well. Of course, an asset could have been exchanged for another asset, the asset could have been given up to discharge a liability, etc. and such events would be disclosed in the footnote to the cash flow statement.

Not surprisingly the analysis of liability accounts works in reverse. Let us now look at a few very simple examples of how this can be used. Interestingly, if you can explain the account completely it means you fully understand everything that went on in terms of transactions during the period to affect the account. Sometimes you can come very close to a full explanation but are off by an immaterial amount. This might be some small idiosyncratic transaction that you are unable to locate or it may just be due to rounding errors in the numbers. Basically however, you understand what happened to change the account. If you can't get the account anywhere near balance it means you are missing something material and important and you better give it more thought!



Any analysis becomes more difficult with the size and complexity of the entity. In any case you at least develop a set of questions to ask someone to get a clearer picture of what went on. Let's make this more concrete and look at a particular company in the next section.

An Example: AMCON

We will use the 2018 10-K of AMCON Distributing Company and Subsidiaries (AMCON)[1] which is engaged in the wholesale distribution of consumer products in the central region of the United States.[2] The AMCON income statement, balance sheet, statement of shareholders' equity and cash flow statements are shown in the appendix, but it might be easiest if you open the full 10-K in a browser.

PP&E

Let's initially look at the Property, Plant and Equipment account (PP&E). There usually is a lot of activity in the PP&E account which aggregates data from many statements and notes in the annual report and is therefore a good place to practice how to analyze activity. We will always use t-accounts as a way to summarize our analysis. The balance sheet in the appendix only shows net PP&E, but gross amounts and the associated accumulated depreciation is shown in note 4 (see below). We use this information to populate beginning (BB) and ending (EB)

4. PROPERTY AND EQUIPMENT, NET:

Property and equipment at September 2018 and September 2017 consisted of the following:

	2018	2017
Land	$ 773,068	$ 648,818
Buildings and improvements	12,206,908	10,661,543
Warehouse equipment	13,424,236	13,195,827
Furniture, fixtures and leasehold improvements	12,018,984	10,732,163
Vehicles	3,229,551	2,195,704
Construction in progress	743,278	1,315,714
	42,396,025	38,749,769
Less accumulated depreciation and amortization:	(26,627,541)	(25,441,783)
Owned property and equipment	$ 15,768,484	$ 13,307,986

balances in the PP&E (gross) account and the accumulated depreciation account. We will now try to explain why and how these balances changed.

	PP&E Gross		Accum. Depreciation		
BB	38,749,769			25,441,783	BB
EB	42,396,025			26,627,541	AB

[1] The complete AMCON 10K is available on the SEC EDGAR sit at https://www.sec.gov/Archives/edgar/data/928465/000155837018009048/dit-20180930x10k.htm

[2] We won't talk too much about AMCON's business in this note, other than to demonstrate how to understand what transactions lie behind the numbers in the report. Readers will find the many pages of discussion in the beginning of the 10-K to be an invaluable resource for understanding the nature of the business and some of the progress to date and risks involved going forward (the context).

Let's consider gross PP&E to begin with. Where do we look for increases in PP&E? One of the obvious places is the cash flow statement to see if anything was purchased for cash. Indeed, in the investing section of the cash flow statement we see they used $3,226,107 in cash to purchase PP&E. So that would be a debit entry into the gross PP&E account.

How else is PP&E acquired? Well, they could have leased assets or more generally, acquired assets that were seller financed with debt. Such transactions are usually indicated in a footnote to the cash flow statement (if none are indicated there you should always look for a leasing footnote or in the PP&E footnote). In the "supplemental disclosure of non-cash information" we can see that AMCON purchased $1,575,000 with debt. Debt would be credited and PP&E debited.

A closer reading of the "supplemental disclosure of non-cash information indicates that some equipment acquisitions were not yet paid for and are included in accounts payable. If the balance in accounts payable for purchases of PP&E decreased from $101,361 to $1,253 as indicated then it must be that AMCON paid off $100,108 (101,361-1,253) of these associated accounts payable during the current year (and these assets must have been acquired in a prior period and were debited to PP&E in prior periods). Now since this $100,108 is an investing cash flow in the current period it must be that it is included in the $3,226,107 already identified in the investing cash flow statement. Since we put this total amount into PP&E and not all of the cash flow relates to the current year's acquisition of PP&E the $100,108 must be taken out of the PP&E account (credited).

At this point, all of the data identified with the PP&E account would not cause the PP&E account to be in balance. It still would need a credit of $1,054,743 for it to be in balance.

Data Source		PP&E Gross			Data Source
	BB	38,749,769			
CFS-INV	Cash purchase	3,226,107	100,108	PPE on acct.	CFS-fn
CFS-fn	PPE-debt	1,575,000	1,054,743	PLUG	
	EB	42,396,025			

Now you should ask yourself, what causes the PP&E account to decrease? Of course the answer is AMCON must have sold or disposed of something, or it could have been impaired in some way and therefore written off. Keep this in mind as for the moment, we will focus our attention on the associated accumulated depreciation account.

Of course we know that depreciation is the annual expense that is credited to the accumulated depreciation account. We can find depreciation expense in the indirect method cash flow statement in the operating section as an add back to net income as it is not a cash flow. In AMCON's statement we note the amount of depreciation expense is $2,238,771. The indirect method cash flow statement is a most reliable place to look for depreciation expense as in the income statement it can be buried in a more general expense category such as selling and administrative expenses. And in a manufacturing setting depreciation also ends up in the cost of products produced! With the one entry of depreciation expense the accumulated depreciation account is not in balance. It needs a debit entry of $1,053,013 to balance.

	Accum. Depreciation			Data Source
		25,441,783	BB	
PLUG	1,053,013	2,238,771	Deprec. Exp.	CFS-OPR
		26,627,541	AB	

Now what causes accumulated depreciation to be debited? Right, if I sell or dispose of assets in any way accumulated depreciation will be debited.

So now we have to look and see if we can find any information about asset disposals. Again, for asset sales or disposals, any gain or loss will show up in the indirect method cash flow statement as an adjustment to net income to arrive at cash flow from operations. And if there were any cash involved in the sale it would show up in the investing section of the cash flow statement. The AMCON cash flow statement lists proceeds from the sale of PP&E in the amount of $5,800, and there is a subtraction of a $4,070 gain on sale of PP&E in the operating section.

Now, the following journal entry "proves" the analysis is correct. That is, the plug to the Gross PP&E account and the plug to the accumulated depreciation account along with the information about the gain on sale and proceeds from sale combine to make a good journal entry- debits equal credits (1,058,813).

Data Source					Data Source
CFS-OPR	Cash		5,800		
PLUG	Accum. Deprec.		1,053,013		
		Gain on Sale		4,070	CFS-OPR
		PPE		1,054,743	PLUG

An Aside: Knowing when you've nailed it!

The journal entry which tied information from the two t-accounts together was pretty good evidence that we have a complete and correct analysis of what happened to PP&E activities during the year. But suppose the journal entry at the end was not in balance. This could easily happen as one might have missed the payment of the $100,108 of accounts payable related to PP&E. In that case the plug to the PP&E account would have been $100,108 larger and in the "proving journal entry in the end, the debits would have been $100,108 smaller than the credits—evidence that I had done something wrong. This would be an indication I need to look more to find increases or decreases in that amount to the gross PP&E account. If you can't find anything else you have the basis for an informed question. What happened that explains the $100,108 imbalance? Or maybe you mistook the supplemental information of non-cash information about equipment purchases classified in accounts to mean that we put in $1,253 more in accounts payable this year. Again the "proving" journal entry would be off and you would look long or reanalyze some of the information you thought you processed correctly but did not. The nice thing is you would have a number that you have to justify and that helps to find an explanation that you are looking for.

Accounts Payable

Let's look at the accounts payable account in current liabilities. This account usually refers to operational transactions, the purchase of inventory on account, the unpaid phone bill, insurance to be paid, etc. Sometimes companies list this account as "trade payables" which is more tightly defined to relate just to operational activities. Oftentimes, whatever the account is called, an investing or financing transaction can impact it. A company may acquire accounts payable in the process of buying another company (an investing transaction), or include a payable incurred when financing a purchase or constructing a fixed asset (a financing transaction). In the case of AMCON it is readably observable that something other than operations had an effect on the accounts payable account. The change in the accounts payable balance increased by \$3,195,552 (20,826,834 – 17,631,552). The indirect method cash flow statement shows that operations increased the accounts payable balance by \$3,295,390. Thus, there must have been an investing or financing transaction that decreased accounts payable. As we saw when we analyzed the PP&E accounts, AMCON did pay off accounts payable relating to equipment acquisitions that were included in the accounts payable account. The \$100,108 amount is exactly equal to \$3,295,390-\$3,195,552. Not only do we now understand in a general sense what went on in the accounts payable account, but it lends credence to the analysis of the PP&E account!

	Accounts Payable				Data Source
		17,631,552	BB		
		3,295,390	Operations		CFS-OPR
		20,826,834	EB		
	Accounts Payable				
		17,631,552	BB		
		3,295,390	Operations		CFS-OPR
Purchase PPE	100,108				CFS-fn
		20,826,834	EB		

Accounts Receivable

Consider the accounts receivable account (A/R) in the balance sheet. Notice that the net amount of these receivables increased \$738,442. Was the entire amount of this increase due to operational activities or were there other investing or financing transactions that impacted this account? This can be checked by looking at entries in the operating section of the indirect method cash flow statement. In fact there are two: an add back in the amount of \$90,000 entitled "provision for losses on doubtful accounts" and a subtraction of \$828,442 entitled changes in "Accounts receivable". Now \$828,442 - \$90,000 = \$738,442 which is exactly the change in the A/R (net) in the balance sheet. Since the change is explained by operating adjustments only we know that investing and financing transactions did not have an impact on this account during the past year.

	A/R - Net	
BB	30,690,403	
PLUG	738,442	
EB	31,428,845	

We will come back to accounts receivable and allowance for uncollectible accounts a bit later in this note. We will see there are several alternative presentations in the indirect method cash flow statement which are acceptable and how oftentimes they can be very confusing, even when they are very informative.

Other Assets

Now consider "Other intangibles", "Goodwill" and "Other assets" listed in AMCON's balance sheet. In each of these three cases what impacted the account change is pretty straightforward. Other intangibles decreased by $79,375 which is the exact amount shown in the indirect method cash flow operating section as an add back for amortization. Goodwill decreased by $1,912,877 which again is exactly equal to the amount of impairment shown in the cash flow operating section. In both instances we now know there was no investment or financing transactions made during the year which impacted these accounts.

					Data Source
	Other Assets				
BB	310,488				
		8,695	Operations		CFS-OPR
EB	301,793				
	Goodwill				
BB	6,349,827				
		1,912,877	Impairment		CFS-OPR
EB	4,436,950				
	Other Intangibles				
BB	3,494,311				
		79,375	Amortization		CFS-OPR
EB	3,414,936				

Similarly, in the operating section of the cash flow statement we find an add back in the amount of $8,695 which tells us that the entire change in this account was due to normal operating activities.

Inventory

While we are looking at current assets and liabilities let's take a look at the inventory account. The balance sheet account shows inventory net of obsolescence. There are two adjustments in the operating section of the cash flow statement relating to inventory. In "Changes in assets and liabilities" there is an adjustment for inventories (presumably the gross amount) of $5,056,917 indicating that inventories, due to normal operations, increased by this amount during the period. There is an adjustment entitled "inventory allowance" that indicates the allowance account decreased by $291,917 during the year. These are the only changes in the operating section of the cash flow statement relating to inventories. A little arithmetic shows that an additional increase of $610,785 is needed to balance the inventory (net) account. So there must have been an investing transaction that increased the inventory account

Data Source		Inventory (net)	
	BB	72,909,996	
CFS-OP		5,056,917	
CFS-OP		291,917	
Footnote		610,785	
	EB	78,869,615	

by this amount. Looking in the investing section of the cash flow statement there is nothing that looks as if it relates to the purchase of inventory (e.g. an acquisition of another business). Snooping around a bit we notice in the "Supplemental disclosure of non-cash information" there is an entry entitled "Acquisition of assets financed with debt" in the amount of $699,717. It is a bit more than we need but seems worthy of investigation. This is where we head to the notes to see if we can find out more. Indeed, there is a note entitled "Acquisition". Reading the note we

2. ACQUISITION:

During fiscal 2018, the Company entered into an agreement to acquire the assets (primarily inventory) of eight retail stores located in Florida for approximately $0.7 million in exchange for a note payable due in four installments through July 2019. As part of the agreement, the Company will continue to operate the eight retail stores which do business as Earth Origins Market ("EOM") and will be included as a component of the Company's Retail Segment. No material intangible assets or liabilities were assumed in connection with this transaction and the Company does not consider the transaction material to the Company's consolidated financial statements.

see that there was acquisition of eight retail stores in Florida which was primarily an inventory acquisition. At least there the $699,717 is more than we need to explain the $610,785 needed to balance the inventory account and it seems reasonable to assume that is what happened. That leaves an excess of $88,932 (699,717 – 610,785) to account for. This is a small amount, likely immaterial, and perhaps we can't explain it but it might be worth to look around a bit. The note indicates that there were no material intangible assets or liabilities acquired in this transaction. The only other assets we haven't really looked at are "Prepaid and other current assets", so let's go there and see what is going on. This account has actually increased by $721,964 (4,940,775 - 4,218,811) during the past year. The adjustment in the operating statement of the cash flow statement for this account is shown as $633,032. This is what normal operations did to this account, but it doesn't explain the entire change. What we need is another $88,932 to balance the account. Sometimes we just get lucky as this is exactly the amount that was left over from the acquisition cost that did not go into inventory.

Data Source		Prepaid and OCA	
	BB	4,218,811	
CFS		633,032	
Footnote		88,932	
	EB	4,940,775	

Even if we had no real interest in the Prepaid and other current asset account, the fact that this account ties out exactly sheds light on the correctness of our analysis of the inventory account.

LTD

Another general set of accounts often of interest are the long term debt accounts. Debt/Equity ratios of all types are computed, but oftentimes we are as interested in the types of debt and shifts from one type of debt financing to another. We only have data from one year here but let's see if we can at least explain what we have. On a real analysis we might want to have an explanation for several to notice if there are any important shifts in financing sources for the entity.

Firms with large seasonal inventories and sales rely on credit facilities to finance operations. Money is borrowed and repaid quickly although the arrangement, as with AMCON, is for a longer period of time than the duration of the loans. With many dollars going in and out in short periods of time, even if the net result is close to zero for the year, the firm must disclose inflows and outflows separately for the year. So in AMCON's cash flow from financing we see in the cash flow statement for financing both the gross inflows and outflows for the year. These inflows and outflows explain the change in the balance of the credit facility account over the year.

Data Source		Credit Facility			Data Source
			29,037,182	BB	
CFS-FIN	Paid	1,418,538,231	1,424,929,646	Borrow	CFS-FIN
			35,428,597	EB	

The long term debt (LTD) in the company is accounted in separate accounts for each major issue of debt. Oftentimes there are short and long term accounts for each particular issue of debt but, as in the case of AMCO, these different issues of debt are aggregated into a single pair of balance sheet accounts with details in a long term debt footnote.

LONG-TERM DEBT

In addition to the Facility, the Company also had the following long-term obligations at fiscal 2018 and fiscal 2017.

	2018	2017
Note payable to a bank ("Real Estate Loan"), interest payable at a fixed rate of 2.99% with monthly installments of principal and interest of $38,344 through August 2021 with remaining principal due September 2021, collateralized by three distribution facilities	$ 2,648,179	$ 3,021,824
Note payable, interest payable at a fixed rate of 4.50% with quarterly installments of principal and interest of $49,114 through June 2023 with remaining principal due September 2023	1,476,772	—
Unsecured note payable due in varying installments through fiscal 2019	629,746	—
	4,754,697	3,021,824
Less current maturities	(1,096,306)	(373,645)
	$ 3,658,391	$ 2,648,179

The aggregate minimum principal maturities of the long-term debt for each of the next five fiscal years are as follows:

Fiscal Year Ending	
2019	$ 1,096,306
2020	532,747
2021	2,008,390
2022	148,665
2023	968,589
	$ 4,754,697

When analyzing these accounts it is convenient to assume that all current payments of LTD come out of the current maturities of LTD account and new issues of LTD increase the balance in the LTD (less current) account. The financing section of the cash flow statement

Data Source		LTD (current)					LTD (less current)			Data Source
			373,645	BB				2,648,179	BB	
CFS-FIN	Paid	541,844				(PLUG)	1,264,505	1,575,000	PPE debt	CFS-fn
			1,264,505	From LTD				699,717	Asset debt	CFS-fn
			1,096,306	EB				3,658,391	EB	

indicates that AMCON made "Principal payments on long term debt" in the amount of $541,844. Now, in order for the long term debt account to have the ending balance it does have, $1,264,505 must have been transferred in to it. Where did it come from? The LTD (less current) account is the obvious answer. We also learn from the "Supplemental disclosure of non-cash information" footnote to the cash flow statement that long term debt was taken on in the amounts of $1,575,000 (for seller financed property) and $699,717 for the acquisition primarily of inventory. These two entries exactly make the LTD (less current) account balance[3].

Shareholder Equity Accounts

Now let's look at a couple of accounts whose explanation is easy to find. These are basically all of the accounts listed in shareholders' equity. An often overlooked statement, the "Consolidated Statements of Shareholders' Equity" in the case of AMCON, gives a complete explanation of the balance changes in all of these accounts. The Retained Earnings and Treasury Stock accounts are presented below along with items justifying balance changes from the consolidated statements of shareholders' equity. The cash flow statement can be checked to see if items are cash flows or not. We can see from the financing section of the cash flow statement that all of the dividends declared during the year have been paid in cash, and that all of the treasury stock acquired was by cash purchase.

Data Source		Retained Earnings			Data Source
			60,935,911	BB	
			3,614,610	Net Income	CSSE
CSSE	Dividends	702,491			
			63,848,030	EB	
		Treasury Stock			
	BB	13,601,302			
CSSE	Purchase	7,723,450			
	EB	21,324,752			

On the other hand, going back to the balance sheet we see, the common stock account increased but not from the sale of stock. As both the footnote to the cash flow statement and the consolidated statement of changes in shareholders' equity indicate, the stock was issued (given) to employees as compensation.

[3] In some instances if one debt issue is coming due with a year the debt may remain listed as long term debt. This occurs when the company has the ability and intention to refinance the old issue of debt with a new issue when it matures.

Accounts Receivable (Revisited)

Finally, let's go back and take another look at accounts receivable. Primarily because of the allowance account for bad debts, the reinstatement of accounts previously written off as bad debts but reinstated because they ultimately were collected, and because of a lack of specific exact disclosure rules for this area, the indirect method cash flow statement is often difficult to decipher in this area. The main caveat here is to be sure you understand what the adjustments in the indirect method statement represent. Let's begin with some observations we can accept as known facts. First, we know the net A/R account as it is on the balance sheet. We also know the beginning and ending balances of the allowance account as these are given on the face of the balance sheet. From this we know the gross amount of A/R at the beginning (30,690,403+800,000) and end (31,428,845+900,000) of the year. We showed earlier that the amount necessary to explain the change in the net A/R account was the sum of the two entries in the indirect method operating section of the cash flow statement.

	A/R - Net	
BB	30,690,403	
PLUG	738,442	
EB	31,428,845	

	Allowance	
	800,000	BB
	90,000	BDE
	10,000	Reinstated
	900,000	AB

Data Source		A/R - Gross	
	BB	31,490,403	
CFS-OP		828,442	
PLUG	Reinstate	10,000	
	EB	32,328,845	

Let's focus on the A/R gross account for the moment. The adjustment in the indirect method cash flow statement is shown to be 828,442. Adding this amount to the beginning balance in the A/R gross account leaves the explanation 10,000 short of explaining the ending balance. Looking at the allowance account we see the balance went up by 100,000 although in the indirect method statement the adjustment for "Provision for loss on doubtful accounts" is only 90,000. In general, the allowance account balance changes because of the transactions shown in the t-account below. That is, bad debt expenses increases the balance, write-off of accounts decreases the balance and reinstatement of previously written accounts increases the balance. In the A/R gross account the generic transactions that impact the balance in this account are as follows: Sales on account increase the balance, collections decrease the balance as do write-offs. Reinstatements generally increase the balance, but then usually immediately decrease the balance by the same amount as they are immediately collected. If a company reinstated an account receivable in one period but did not collect it yet but will collect it in the next period that reinstated receivable would still have been in the balance sheet at the end of the year. So the most likely explanation of why the 828,42 doesn't explain the ending balance as there are 10,000 of accounts this period which were reinstated but not yet collected. This event would also increase the balance in the allowance account beyond the increase due to the addition of bad debt expense.

Allowance	
	BB
Write-off	Expense
	Reinstate
	EB

	A/R - Gross	
BB		
	Sales	Collect
		Write-off
	Reinstate	
EB		

Recap

We hope to have demonstrated to you the wealth of aggregate transactional information that is available to be had in financial statements. The trick is to develop a sense of where to look for it. Reading financial statements is an art which must be practiced to gain proficiency in it. One recurrent theme in all of this is the frequency with which one uses information in the indirect method cash flow statement to really get to explain transactions and to know what went on in the entity. The indirect method statement is the key to understanding how the accrual numbers tie to the cash flow numbers and oftentimes is the starting point to understanding transactions or to pointing you in the direction of where to look in the footnotes for an explanation of something.

For pedagogical reasons we picked an annual report where many of the numbers tie out so that you would get an introduction as to how to go about explaining and understanding numbers and the transactions which generated them. You cannot explain every number in every annual report but, as we indicated before, you can generate a list of intelligent questions to ask.

APPENDIX: AMCON STATEMENTS

AMCON Distributing Company and Subsidiaries

CONSOLIDATED STATEMENTS OF OPERATIONS

	Fiscal Years Ended September	
	2018	2017
Sales (including excise taxes of $368.4 million and $368.8 million, respectively)	$1,322,306,658	$1,274,984,408
Cost of sales	1,245,375,460	1,202,536,285
Gross profit	76,931,198	72,448,123
Selling, general and administrative expenses	66,781,234	64,173,895
Depreciation and amortization	2,318,146	2,049,475
Impairment charges	1,912,877	—
	71,012,257	66,223,370
Operating income	5,918,941	6,224,753
Other expense (income):		
Interest expense	1,194,373	825,690
Other (income), net	(54,042)	(39,513)
	1,140,331	786,177
Income from operations before income tax expense	4,778,610	5,438,576
Income tax expense	1,164,000	2,489,000
Net income available to common shareholders	$ 3,614,610	$ 2,949,576
Basic earnings per share available to common shareholders	$ 5.47	$ 4.34
Diluted earnings per share available to common shareholders	$ 5.38	$ 4.26
Basic weighted average shares outstanding	660,925	679,478
Diluted weighted average shares outstanding	672,449	692,183
Dividends declared and paid per common share	$ 1.00	$ 1.00

The accompanying notes are an integral part of these consolidated financial statements.

AMCON Distributing Company and Subsidiaries

CONSOLIDATED BALANCE SHEETS

	September 2018	September 2017
ASSETS		
Current assets:		
Cash	$ 520,644	$ 523,065
Accounts receivable, less allowance for doubtful accounts of $0.9 million at September 2018 and $0.8 million at September 2017	31,428,845	30,690,403
Inventories, net	78,869,615	72,909,996
Income taxes receivable	272,112	—
Prepaid and other current assets	4,940,775	4,218,811
Total current assets	116,031,991	108,342,275
Property and equipment, net	15,768,484	13,307,986
Goodwill	4,436,950	6,349,827
Other intangible assets, net	3,414,936	3,494,311
Other assets	301,793	310,488
Total assets	$ 139,954,154	$ 131,804,887
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 20,826,834	$ 17,631,552
Accrued expenses	8,556,620	7,553,089
Accrued wages, salaries and bonuses	3,965,733	3,477,966
Income taxes payable	—	544,069
Current maturities of long-term debt	1,096,306	373,645
Total current liabilities	34,445,493	29,580,321
Credit facility	35,428,597	29,037,182
Deferred income tax liability, net	1,782,801	2,336,263
Long-term debt, less current maturities	3,658,391	2,648,179
Other long-term liabilities	38,055	34,100
Shareholders' equity:		
Preferred stock, $.01 par value, 1,000,000 shares authorized	—	—
Common stock, $.01 par value, 3,000,000 shares authorized, 615,777 shares outstanding at September 2018 and 678,006 shares outstanding at September 2017	8,441	8,314
Additional paid-in capital	22,069,098	20,825,919
Retained earnings	63,848,030	60,935,911
Treasury stock at cost	(21,324,752)	(13,601,302)
Total shareholders' equity	64,600,817	68,168,842
Total liabilities and shareholders' equity	$ 139,954,154	$ 131,804,887

The accompanying notes are an integral part of these consolidated financial statements.

AMCON Distributing Company and Subsidiaries

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

	Common Stock		Treasury Stock		Additional Paid in Capital	Retained Earnings	Total
	Shares	Amount	Shares	Amount			
Balance, October 1, 2016	818,453	$8,184	(141,396)	$(12,476,381)	$19,525,554	$58,693,241	$65,750,598
Dividends on common stock, $1.00 per share	—	—	—	—	—	(706,906)	(706,906)
Compensation expense and issuance of stock in connection with equity-based awards	12,985	130	—	—	1,300,365	—	1,300,495
Repurchase of common stock	—	—	(12,036)	(1,124,921)	—	—	(1,124,921)
Net income	—	—	—	—	—	2,949,576	2,949,576
Balance September 30, 2017	831,438	$8,314	(153,432)	$(13,601,302)	$20,825,919	$60,935,911	$68,168,842
Dividends on common stock, $1.00 per share	—	—	—	—	—	(702,491)	(702,491)
Compensation expense and issuance of stock in connection with equity-based awards	12,651	127	—	—	1,243,179	—	1,243,306
Repurchase of common stock	—	—	(74,880)	(7,723,450)	—	—	(7,723,450)
Net income	—	—	—	—	—	3,614,610	3,614,610
Balance, September 30, 2018	844,089	$8,441	(228,312)	$(21,324,752)	$22,069,098	$63,848,030	$64,600,817

The accompanying notes are an integral part of these consolidated financial statements.

AMCON Distributing Company and Subsidiaries
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Fiscal Years Ended September	
	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	$ 3,614,610	$ 2,949,576
Adjustments to reconcile net income from operations to net cash flows from operating activities:		
Depreciation	2,238,771	1,784,475
Amortization	79,375	265,000
Impairment charges	1,912,877	—
Gain on sale of property and equipment	(4,070)	(31,622)
Equity-based compensation	1,271,840	1,394,879
Deferred income taxes	(553,462)	(243,387)
Provision for losses on doubtful accounts	90,000	98,000
Inventory allowance	(291,917)	(101,716)
Other	3,955	3,285
Changes in assets and liabilities:		
Accounts receivable	(828,442)	(755,299)
Inventories	(5,056,917)	(24,403,398)
Prepaid and other current assets	(633,032)	4,389,238
Other assets	8,695	(22,406)
Accounts payable	3,295,390	(467,348)
Accrued expenses and accrued wages, salaries and bonuses	1,563,964	669,873
Income taxes payable and receivable	(816,181)	709,028
Net cash flows from (used in) operating activities	5,895,456	(13,761,822)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of property and equipment	(3,226,107)	(2,565,699)
Proceeds from sales of property and equipment	5,800	46,654
Net cash flows from (used in) investing activities	(3,220,307)	(2,519,045)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Borrowings under revolving credit facility	1,424,929,646	1,311,967,154
Repayments under revolving credit facility	(1,418,538,231)	(1,293,467,198)
Principal payments on long-term debt	(541,844)	(362,495)
Repurchase of common stock	(7,723,450)	(1,124,921)
Dividends on common stock	(702,491)	(706,906)
Withholdings on the exercise of equity-based awards	(101,200)	(107,082)
Net cash flows from (used in) financing activities	(2,677,570)	16,198,552
Net change in cash	(2,421)	(82,315)
Cash, beginning of period	523,065	605,380
Cash, end of period	$ 520,644	$ 523,065
Supplemental disclosure of cash flow information:		
Cash paid during the period for interest	$ 1,137,691	$ 819,969
Cash paid during the period for income taxes	2,533,643	2,023,359
Supplemental disclosure of non-cash information:		
Equipment acquisitions classified in accounts payable	$ 1,253	$ 101,361
Purchase of property financed with debt	1,575,000	—
Acquisition of assets financed with debt	699,717	—
Issuance of common stock in connection with the vesting and exercise of equity-based awards	1,183,091	1,262,763

The accompanying notes are an integral part of these consolidated financial statements.