Accounting Basics

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Part I: The "Balance Sheet" or "Statement of Financial *Position*"

•The most pervasive human cultural feature on this planet is "Double Entry " accounting. It was invented in Italy by a Franciscan Friar named Pacioli, it was deemed so important that Italy cosidered it a capital offense to reveal to anyone outside of Italy.

•Accounting professionals and teachers of accounting have developed so many special words and byzantine procedures as to make it a jungle of confusion to outsiders. However, its basic principles are so simple a child can understand them.

•In a left-hand column it employs a graduated list of things of value generically called *assets*. From the most "liquid" assets (such as cash) to the most "fixed" assets (such as property).

•In a right-hand column it employs a list of claims upon those assets, a list of generically called *equities*. These are of two radically different types, 1) equities belonging to others besides the ownership of the list of assets in the left-hand column, and 2) equities belonging to the ownership of the assets of the left.

•If you add up the value of the entire column of assets and subtract the total of all outsider's equities, what is left, obviously, is the total of equities belonging to the ownership of the assets. That is, if your family assets amount to $40,000 and you owe $4,000 to the bank, your real value, the net value of the assets constituting your ownership is $36,000.

•One of the grandest truths embodied in this system is, interestingly, if you change anything on either side of the "ledger" (the two columns of assets and equities) you have to change something else.

•There are four and only four ways this can be done: 1) you both add and subtract on the left, 2) or, same on the right. Or 3) you can add to both sides. Or, 4) you can subtract from both sides. By the way, you can create a "double entry" that is really a triple or quadruple entry, or more, so long as one side is not affected more than the other. Example: you buy a horse and pay the man back a loan with the same check. In that case your bank goes down, say, $200, but your assets (horse) go up $100, and your external equities (the amount owed) goes down $100. Here the net effect on both sides is a reduction of $100.

Note that it is perfectly possible to get by with only these three kinds of accounts: Asset accounts, Equity (outside) accounts, and Equity (ownership).

If you pay for something that has no enduring value, like a phone bill, and you can't simply subtract money from the bank and add to the list of assets in some way, you must, each time you make that kind of a payment, subtract from the bank (on the left) and subtract from owner's equity on the right.

Or, if a rich uncle gives you a thousand dollars you can add it to the bank and add it to the owner's equity. These Asset/Equity categories are the original categories for double entry accounting. These three categories are called Permanent Accounts.

However, if all you use are these accounts, after a time you have no record of all the things which you did which *reduced* your owner's equity, nor the things that happened or things you did that *increased* your owners equity. You DO know where you stand, where you end up. You DO have, so to speak, a "flash picture" of the status quo, your "financial position," but you can't see the detailed reasons explaining how you got there.

Thus, there is a better way. It involves adding two more categories of accounts, namely Expense and Income. Note these are not simply payments out and receipts in. They are events which immediately reduce or increase your Owner's Equity, and, as they say, affect the "bottom line." There will still be events (transactions) which will only affect the permanent accounts without affecting the Owner's Equity, such as taking out a loan from a bank, or paying off such a loan. Or buying a piece of expensive equipment.

Now, however, in order to keep a running log of all events we need what is called a **Journal**, where you "log" all events in their chronological sequence, whether they affect only the upper accounts or only the lower or any combination thereof. This is not the **Ledger**, where you list all of the accounts and everything which affects them The Journal is the first book of entry. All double entry transactions are recorded there *first* and then transferred ("posted") to the Ledger ,so you see your *"financial position."*

Note we also now introduce a consistent numbering of accounts. All Asset accounts, like Bank, receivables, equipment, etc. begin with a "1," all external equity accounts begin with a "2," etc. as follows:

1000-1999 **Assets**

2000-2999 External equties ("**Liabilities**")

3000-3999 Ownership equities (Capital, Net Worth, corporate equity, Fund balance, or recently **Net Assets**)

4000-4999 **Income** (only money coming in you don't have to pay back)

5000-9999 **Expense** (only money going out which does not add to your assets)

(Note that a lot more numbers are available for

Expense categories. They always seem more numerous than Income categories.)

Part II: The "Income Statement" or "Statement of Financial *Activity*"

Suppose you may pay out money (or give up some other asset) for something *that has no enduring value*, like a phone bill. To do this you can't simply subtract money from the bank (or from that other asset) and add something *of value* to the list of assets, like a piece of equipment,. Or, suppose you reduce your cash or other assets to secure some service but are not adding to your assets or reducing some part of your your external equities. In that case, you must, each time you make that kind of a payment (or asset reduction), both subtract from assets and subtract directly from owner's equity (Net Assets, Net Worth, Capital, etc.) on the right. We have already seen how this works in the +…+, +-, -+, or -…- types of transactions where in Part I both take place in the realm of the Assets and Equities.

However, now that we are operating a **Journal**, it is appropriate to "post" such entries during an accounting period to either Income or Expense. This way you can easily find out if your income is greater than your expense.

Furthermore, at the close of an accounting period you can subtract the difference of all expense and income against the Owner's Equity (e.g. Net Assets). At that point you may "wipe out" all Income and Expense accounts to zero and start over, since all those expense and income entries were merely designed to allow you to see what happened, to see how you got to your new financial *position*.

In actual practice there is a certain amount of flexibility in whether you call something an expense or an asset. Small things, even of value, like postage stamps and office supplies, things you use up, are usually called expenses even though they do not disappear overnight. In fact, at the end of an accounting period, be it a month, a quarter, a semester or a year, if you have considerable value left over of stamps or office supplies that value is sometimes "hoisted" up into the asset section.

By the same token if you receive money as a gift, you might call it either income or an equity, especially if the gift was designated for a particular use and that use was not coming up very quickly. Now, so that you don't forget that you are expected to use the money for a specific purpose you might call this particular kind of equity a "Reserve."

Thus, if you borrow money you have to pay back it constitutes an external equity, a liability. If you are given money it is usually to be considered income. What if receive money because you have provided some service or sell bit by bit some of your merchandise assets? This, too, can be called income, mainly because you don't have to pay it back like a loan. However, unless it is an outright gift (you don't have to repay) rarely do you receive money for either services or goods which does not at least in a minor way cut down on the real value of certain of your assets.

Suppose you have a store and purchased $10,000 worth of goods to be sold. In a given month you receive $5,000 for goods you only paid $4,000 ? You could [this is not the way it is usually done] subtract $4,000 from your merchandise asset and record only $1,000 as income. But, in the process of selling you are having to pay overhead which could run another $500, so you might want to record only $500 as income, and shave the cost of your rent or salaries a bit, etc.

The usual thing to do, during an accounting period (not at the end), is to record the total amount received, the $5,000 as income (on the right hand), and of course add $5,000 to your bank account. You realize, of course, that simple as this is, you are overstating your true income.

However, at the end of the accounting period you do an inventory of your salable goods and end up subtracting $4,000 from your inventory (and adding the same amount as an expense item called usually, "Cost of goods sold." In other words your overstatement of income does not last beyond the end of the accounting period. Then is when you make the reckoning.

At the end of an accounting period you want ~~to~~ Accrue bring everything, every number, into reality. So, you scrutinize all of your assets to see if none of them has degraded or evaporated. You look closely at all of the things you have considered expense, and if you have significant value, say of postage stamps ($200) you subtract from postage and add that amount to your assets. If you have paid rent in advance, you subtract the amount you have not actually used up and add that into your list of assets as "Prepaid expense" so as to get a more accurate picture. Similarly if you have received money for goods or services not yet delivered you subtract the unfulfilled amount and at the same time add to your external equities the same amount as "Unearned income." Again, to be more accurate.

Note that a certain amount of subjectivity is involved? Some accountants do more nitpicking than others, and all of them could come out with more than one final outcome. Thus, the grounds for suspicion about the role of accountants Enron or otherwise.

Part III: Three "Secrets"of Accounting

1. One nifty trick is summing separately the permanent accounts and the temporary accounts—and getting equal differences!

This always seems amazing. It is basically just arithmetic. After journalizing dozens of double entries and posting them to the ledger, it is obvious that the total assets, total equities, total expense and total income may each be different from where you began.

What is not so obvious is (this is what appears amazing) if you subtract your Equity total from your Asset total you get exactly the same number as when you subtract your Expense total from your Income total! The latter is called profit or loss depending whether it is positive or negative. The former, identical number (but on the opposite side of the Ledger) is accordingly called an increase in Net Assets or a decrease in Net Assets depending whether it is positive or negative.

By the way, this is the acid test of exacting posting, and exacting posting in turn is dependent on infallible journalizing. If any of your double entries or triple entries, etc. are not equal on both sides of the ledger then this amazing "trick" simply won't work. And, you will have to go back to your journal and make sure each and every one of your double, equal and opposite, entries is correct.

This is not the only test, of course. You can put precisely equal and opposite intries into the ledger but get them into the wrong account number and this amazing trick will still work flawlessly. Thus, one more test is very basic.

Print out the entire ledger and look to see if all of the things have been stashed away in the right categories. If you have mistakenly put down a piano purchase as an expense the ledger will still balance but your calculated profit or loss will be way off. Similarly, if you list in your journal a telephone bill under equipment you are in trouble but still in balance.

These were obvious examples. Not so obvious is when you buy something like a computer for another department. It is equipment isn't it? No, not in your ledger. You indicate in your ledger the amount you paid on behalf of another cost center as a "Receivable," which means it will come back to you in cash, and won't disturb your own list of equipment. Or, if you get paid an honorarium by a church or Perspectives class and the check is made out to you and you put it in your personal account thinking of it as income you have made a mistake. It should be considered a "Payable" and will be listed under Equities, specifically Liabilities, namely, something you owe to your institutional ministry account.

2. Another nifty trick is formulating "double entries" you don't have to use any negatives. Using the opposite side is the same thing.

This seems endlessly confusing unless you stop to realize that pulling up, that is, reducing the load, on one side of a teeter totter is the same as pushing down with the same force on the other side. In olden days adding machines couldn't subtract. They could only add. Someone had a new idea of dealing with a *deduction* from an asset (which, of course, is always on the left). Put it deliberately on the right hand side. The teeter totter is still in balance. That is, instead of subtracting $400 from (adding a negative number to) say, the bank, you could put that same account number and $400 over on the other side of the ledger. Meanwhile, if what you spent this money for was a piece of equipment you would put $400 under equipment on the left. But if you wished to reduce a loan (always on the right) by that amount, you could put $400 into that loan's account number *on the left!* In all these cases you would have $400 on each side of the ledger. This fact would pop out clearly reassuring you that you do in fact have a valid double entry.

Thus, let's for fun journalize the last events.

a. *Intuitive*:

1010 Bank Account	-400	
1450 Equipment	+400	

b *Tricky but efficient*

1450 Equipment	400	
1010 Bank Account		400

Now this last is much easier to check. Let's go through this with the second example:

a. *Intuitive:*

1010 Bank Account	-400	
2100 Payable loan		-400

b *Tricky but efficient*

2100 Payable loan	400	
1010 Bank Account		400

Granted this is not so much of an improvement, but it does avoid the use of minus signs. It is equivalent because an Equity account (the clue is its beginning with a "2") which is an inherently right-hand account has the effect of a negative on the right when it is listed as positive on the left.

In general then when you look at a ledger, which always has two sides or two columns, you may find the numbers under a given account to be scattered on both sides. The ones that are effectively negative are those on the opposite side of the account number. Let me give an example.

If you look in a ledger under office supplies, you look in the section from 5s to 9s, expenses. You may find most of the numbers are on the left, since expenses are pseudo assets and as such "live" on the left. However, if you bought an extra ten reams of paper for another cost center, and were paid for that, the journal entry would look something like this:

1010 Bank Account	25	
6340 Office supplies		25

Note that the bank number is on the side pertaining to the account, e.g. left. Assets are on the left. But the purchase is on the right, and therefore will *subtract* from the total you have spent on office supplies. It is thus the equivalent of a left-hand negative! In this case you are, in effect, both adding and subtracting on the left! (Even though there are numbers on both sides which are instantly verifyable as an equal and opposite "double entry."

3. The third "Secret" is the most mystifying of all. It really is not so "nifty" although it could be. It is very nearly constantly confusing.

Once again "in the olden days" people would come into a general store, I would suppose, and want to see their financial status. They had been taking things away for a time "on account" and now they wanted to pay toward what they owed. Meanwhile the store owner had been writing down in a ledger under an account for their particular name every single item they took "on credit." So here is a sample of what might have happened:

	Debits	Credits
Jan 1,	2.87	
Jan 5,	6.34	
Jan 18,	12.02	
Jan 21,		15.00
Jan 28,	14.50	
Totals	35.73	15.00

OK, in this case, the customer sees that his debits are larger than his credits. He is asked to bring his account up to date and to do so he has to pay an additional 20.73, which will be entered, he is told, as a "credit" to his account.

Now, down through the centuries this terminology of "debits" for numbers that go on the left and "credits" for numbers that go on the right has stuck, and is now used even where your intuition is totally the opposite. For example when you write a check you reduce your Bank account, which is on the left side of the ledger by putting a number on the right side of the ledger (as with secret #2). Lo and behold this is called a "credit" to the bank account even though it reduces the bank account. See? It's crazy.

Furthermore, all of the asset accounts and expense accounts, which are on the left side of the ledger now become called "Debit accounts," and all of the equities, whether external or internal are called "credit accounts."

There are many stories about the illogicality of the debit/credit terminology. It is simplest to forget the general store illustration and just put it down that "debit" means left, and "credit" means right, and they don't ever mean anything else. Thus when you "debit" a credit account you are subtracting and when you "credit" a debit account you are subtracting and when you debit a debit account you are adding, etc.

This is a left curve, I know, but you can get used to it.