

## **Fixed Assets**

by Michael Goldman

Writing the previous articles about Accounts Receivable and Inventory was fun. OK, I've probably just ruined my chances of being invited to your next company party with that statement. What I meant was that immersing oneself in the details of receivables and inventory enables one to learn a significant portion of what you need to know about a company.

Fixed Assets, in contrast, are not anywhere near as dynamic or interesting. Most of the ratios, trend analysis, and other analytical techniques that financial people use focus on the parts of companies that move - income, inventory, receivables, payables, etc. Hardly anyone ever focuses on fixed assets - a search through an 1,100 page graduate text on Managerial Finance, for example, shows fixed assets mentioned only 8 times.

The lack of attention and respect given to Fixed Assets by pretty much everybody except facilities managers probably explains why such a large part of Worldcom's fraud (one of the largest frauds ever at the time it was uncovered) involved fixed assets - the company overstated income by hiding expenses on its balance sheet as fixed assets. These costs were hidden in plain sight, out in the open in a place nobody ever looked.

Yet, the Fixed Assets have traditionally been the backbone of the company, the core that holds everything together and gives it what it needs to operate - production machinery, buildings, computers, trucks, and fixtures are all fixed assets. For many companies, Fixed Assets is one of the largest numbers on the balance sheet.

For strategic or financial reasons, many companies have been shedding fixed assets. Logistics, manufacturing, information technology, and other asset intensive processes are outsourced more and more in the global economy. A company that is outsourcing will not have the fixed asset investment on its balance sheet that a more traditional company will, and their balance sheets will look dramatically different, even though they may have the same operational capabilities.

Regular readers of this column will not be surprised at all to be told that, like everything else in the accounting world, there is even subjectivity and estimation used in coming up with the amount of Fixed Assets to put on the balance sheet. How can this be? Fixed assets are visible and tangible like inventory but don't have the valuation problems caused by constant fluidity. Fixed Assets are stable, they don't turn over constantly like inventory or receivables do (if they did, they wouldn't be called "fixed"). They are there, year after year, performing their function in the background. What is there to be uncertain about?

Let's start with the accountants' definitions and assumptions regarding fixed assets:

- They are acquired for use in business operations. Land that you are going to build your factory on is a fixed asset. Land that you own but plan to dispose of is a non-operating asset. If you are a real estate developer, land is your inventory.
- They are long-term in nature. A truck purchased to deliver product and expected to have a five-year life is a fixed asset, even if the owner's son-in-law crashes it beyond repair the second month it is in use. The same truck purchased with the intention of smashing it at a Monster Truck Spectacular Sports event is a business expense, not an asset.
- They have physical substance. In today's knowledge economy everyone fixates on the value in intangibles such as goodwill or patents. Companies in the Cloud such as Amazon are considered much more attractive than their bricks and mortars counterparts such as Barnes and Noble. Yet, the accountant orders the balance sheet based in order of what the accounting world considers to be most valuable, and accountants still rank tangibility over intangibility.
- They must provide new future value at their time of acquisition. Repairs to a roof that merely allow it to live out its expected life are expenses. However, if those exact same repairs give the roof an additional ten years of life, or allow it to keep a larger area dry, then they are fixed assets. On the third hand, if the roof is damaged in a storm and repaired in a way that extends its useful life, those repairs are still probably expenses, not fixed assets. Getting confused yet?

Once you've decided that an expenditure is indeed a fixed asset, the next issue is how to value it. Assume that 40 years ago your mother paid \$3,000 for a corner lot in a small town 30 miles from the big city and started selling flowers there. Over the years your father built her a nice little flower store, mostly with bricks that he picked up for free from demolished buildings in the area. Thirty years later, they had a thriving floral business and bought a greenhouse for \$30,000 to put next to their brick building.

Further assume that a market study today shows that comparable brick buildings to the one your parents sell flowers out of are priced at around \$50,000. Since the building doesn't meet current building codes, it would cost \$95,000 to replace it if an exact replacement needed to be constructed. The county says the land plus buildings are worth \$166,000 for property tax purposes. The small town is now a large wealthy suburb and a real estate developer offered your parents \$1.2 million to buy their flower store so he can add it to his contiguous parcels and build a hotel / retail complex there.

Forget about what you will do with your inheritance - the more interesting question, of course, is what value would the flower store have on your parent's balance sheet? The answer, which will make no sense to anybody other than an accountant or the IRS, is about \$23,000.

The reason for the low valuation on the balance sheet goes back to the accountant's needs to use historical cost, to be consistent, and to be conservative. The cost of the lot, \$3,000, will be the value on the balance sheet forever unless something happens that makes the land worth even less than that.

The brick building was self-constructed with mostly free materials and therefore has no cash or cash-equivalent price to use on a balance sheet - accountants only record arm's length transactions with outside parties, although larger and more sophisticated companies are sometimes allowed to allocate costs to self-constructed projects. If interest costs were incurred in financing the construction, those could be capitalized into the asset price. The concept of historical cost dominates the balance sheet valuation.

The \$30,000 cost of the greenhouse meets all the criteria to become a fixed asset value on the balance sheet. However, that was 10 years ago. Assuming the greenhouse had a 30-year estimated life at the time it was purchased, 1/30th of it would need to be expensed every year to more appropriately match the expense of wear and tear on the asset with the revenues the asset helped produce. The greenhouse could be worth \$50,000 now to another florist or nothing to the hotel developer who wants to knock it down, but neither of those are relevant for its balance sheet presentation- it will be written down \$1,000 per year until it has zero value, and then it will remain at zero value on the balance sheet even if it is continued to be used.

The periodic write-down of the asset, by the way, is called "Depreciation". Depreciation is the allocation of the cost of the fixed asset to expense over its useful life. The purpose of depreciation is to try to match costs to the revenues those costs create.

Depreciation can be calculated under many different methods, most of which have little correlation to economic reality. The exact methods of calculation are not as important here, the main point is to show how most methods of depreciation make no sense other than that they are convenient and consistent.

- The Straight-Line method -depreciation is the same amount for every period of the asset's estimated useful life as estimated by management. This method, like most others, considers the estimated salvage value of the asset when calculating the amount to depreciate.
- Double-Declining Balance - twice the write-off rate as used in the straight-line method, but applied against a lower base each year. Salvage value is not considered in this method.
- Sum of the Year's Digits - a method using a schedule of fractions that results in more depreciation than the Straight-Line method but less than Double-Declining Balance. This method does consider salvage values.
- Tax tables - this method uses a useful life and depreciation rate based on whatever the U.S. Congress has decreed for the particular asset class to be. It can differ based on the industry or size of company. Despite all the deep wisdom that goes into setting these rates and methods, they are subject to immediate and significant change every time the Tax Code is tinkered with (i.e. every time there is a political need).
- Activity methods - finally, a method that makes economic sense. Each period's depreciation will be a proration based on that period's actual output from the asset divided by the expected total output that the asset is capable of producing.

Depreciation is calculated and expensed every accounting period. It is always based on historical cost.

As you can see, on the day that an asset is purchased it is probably fairly stated on the balance sheet. Besides matching costs to revenues, the purpose of depreciation was to account for the asset's decline in value due to wear and tear. This probably was fairly accurate in the old days when things were simple and the world worked on a linear basis.

In today's environment of swirling inflation and deflation, booms and crashes, technical obsolescence, increased regulations that often make grandfathered assets more valuable, etc., pretty much the only thing that can be said for sure is that the older an asset gets, the less likely its value on the balance sheet is to have any relevance at all compared to its real market value.

By the way, Depreciation is the D in EBITDA. EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization) is often used as a proxy for the cash flow available to the two stakeholders in a company's existence who consider themselves to be the most important of stakeholders, the company's senior lenders and the government. Depreciation is put back into earnings to approximate cash flow because depreciation is a "non-cash" expense. There could be a significant depreciation charge to earnings, but the cash changed hands when the asset was paid for, not when the depreciation expense was recognized.

EBITDA is not a useful proxy for cash flow in a business that is constantly buying more fixed assets, as it ignores the cash costs of those assets. It also does not accurately reflect cash flow when other components of the balance sheet, such as inventory or payables, are materially changing in unsynchronized directions. And lastly, EBITDA becomes less meaningful as a cash flow proxy as you move further down the pecking order in being able to lay claims on those earnings.

Following accounting rules may end up giving you a balance sheet that has very little relationship to current market conditions, but being conservative and consistent and valuing everything at measurable arm's length transacted amounts is the way of the accountant. The constant attempt to maintain the appearance of integrity and objectivity in accounting has played a primary role in the development of rules that sometimes seem to make no economic sense at all. The accounting valuation of Fixed Assets, because of their long term nature, tends to stray further and further from true economic value than the valuations of shorter term assets do.