Making your firm's balance sheet work for you

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A step-by-step approach to creating and using a financial model to ensure your firm's future success.

By Paul J. Zofnass

For an engineering/consulting (E/C) firm, managing your balance sheet can be as important to generating cash flow and financial health as managing your income statement. Yet most E/C firms don't focus on this task.

One reason they disregard it is because of today's complex accounting balance sheets, which are put together by accountants to comply with complicated accounting rules that are generally designed for non-engineering businesses. However, with a few easy steps, you can recast an accounting balance sheet into a simple, practical analytical model that a CEO, CFO, or business manager can use to improve cash flow, reduce debt, improve returns to shareholders, finance growth more easily, and facilitate internal transition of stock between retiring shareholders and the next generation. Here's how.

Step 1: Create a Common-Size Balance Sheet
Categorize your assets and capital, and represent them as a percentage of your gross revenue, to create a Common-Size Balance Sheet that is useful for analyzing and modeling your business. To do this, take all of the Assets on the left side of your balance sheet and lump them (rounded totals) into the four categories listed below. (Don't worry about whether these are current or long-term assets.)

- **Cash** and equivalents;
- **Receivables**, including billed and unbilled (work in process (WIP)) receivables;
- **Fixed Assets** net of depreciation; and
- **Other**, including every other asset that doesn't fall into the above three categories. (This should be a fairly small number.)

Next, take all of the line items on the right side and organize them into one of the following three capital categories:

Payables (and Accruals) — This should include accounts payable, accrued liabilities, deferred taxes, and any other items that represent non-interest bearing liabilities (include short-term and long-term, although most will be short-term, but no need to differentiate). The key to this category is that all items in it are essentially "Free Capital" — you don't have to pay any interest or appreciation on them.

Debt — This should include all interest-bearing debt or liabilities, whether to banks or shareholders or whomever. (Note: The sum of Payables and Debt should equal your Total Liabilities.)

Equity — This should essentially equal all Assets less all Liabilities. It will also likely be the total the accountants call Shareholders Equity or Book Value (which may in turn be comprised of several components, including stock at cost, paid-in-capital, and retained earnings).

Then, convert the dollar totals of each above group into a percentage of your Gross Revenues (Revenues). This creates a Common-Size Balance Sheet. If you are a typical, employee-owned E/C firm, the result should look something like the example provided in Figure 1.

Figure 1: E/C Firm Common-Size Balance Sheet (Gross Revenues = 100)

ASSETS		CAPITAL			
Cash	3	Payables (Include Accrued Liabilities, Customer Advances, Deferred Tax, Other)	16	*Free Capital*	
Receivables (Include Unbilled/WIP)	25				
Fixed Assets (Net of Depreciation)	6	Debt	8	*Expensive Capital*	*Invested Capital*
Other	6	Equity (Book Value)	16	*Most Expensive Capital*	
TOTAL ASSETS	40	TOTAL CAPITAL	40		

Total Assets will represent roughly 40 percent of your annual revenues, and the largest component of that will be Receivables, which run typically about 25 percent of a year's revenues.

Step 2: Manage your balance sheet
Here are the three rules of balance sheet management you should follow.

1) Squeeze your Assets. Try to reduce each of these asset categories as best you can. Given that the largest category will be Receivables, this generally entails getting your bills out and collecting the resulting receivables as quickly as possible. Almost without exception, the combination of billed and unbilled receivables should be less than 25 percent of a year's Gross Revenues, and ideally 20 percent or less. But the other asset categories (Cash, Fixed Assets, and Other) should also be reduced as much as possible, without hurting your revenues.

Why do you want to reduce all of these asset categories as much as possible? Because you need to "finance" all of those assets. For every dollar of Asset you have, you need to have an equal dollar of

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Capital to finance it. Therefore, the fewer Assets you have, the less you need to finance!

2) Maximize your Free Capital. Maximize your Payables or Free Capital. Why? Because it is free! Remember, whatever you can't finance with Free Capital, you will need to finance with either Debt, which you have to pay interest on, or Equity, which expects a higher rate of return than the debt-holders.

Additionally, the combination of Debt (which is referred to as Expensive Capital) and Equity (which we think of as being Most Expensive Capital) is Invested Capital. So, Total Assets less Free Capital equals Invested Capital. For a given level of Assets, the more Free Capital you have, the less Invested Capital you will need. And why use any Expensive Capital if you can use Free Capital?

3) Balance your Debt and Equity. Once you have maximized your Free Capital, you will need to complete your financing with a combination of Debt and Equity. What should that ratio be? It depends on your tolerance for risk. The advantage of using Debt rather than Equity is that it is almost always considered to be less expensive than Equity, even if you don't have to pay your shareholders off until they retire or the company is sold.

However, while Debt is less expensive than Equity, Debt is more risky than Equity. If you fail to pay your interest or principal when due, the lenders can force you into bankruptcy or liquidation, in which case your Equity may well become worthless. So, too much Debt in the balance is not a prudent idea.

On the other hand, having no Debt in the equation, i.e. financing all of your Invested Capital needs through Equity, is frequently considered to be imprudent because it is the most expensive capital you can use. If you can substitute some of that Equity Capital by using Debt Capital, you will likely improve the returns to the remaining equity holders — which is referred to as *leveraging* their investment.

Step 3: Reap the rewards

So, what is the big advantage of managing your balance sheet? Let me give you an example: If you can improve the speed of your billings and reduce your Receivables turnover by 10 percent, reducing Receivables from 25 percent of Revenue to 22.5 percent, your Total Assets will decrease by that same 2.5 percent of Revenue, meaning from 40 percent to 37.5 percent. This means that the Capital needed to finance your Assets also decreases from 40 percent to 37.5 percent (your total Capital needs to equal your Total Assets). Also assume that you can keep your Free Capital at the same level as before. Then you can do one of two things with this 2.5-percent of Revenue savings in Capital:

1) You can reduce your borrowed Debt by 2.5 percent of Revenue, dropping it from 8 percent to 5.5 percent, or by roughly one-third. Do you know of any easier way to reduce your outstanding Debt by a third? And what will that save you in annual interest expense, thereby making you more profitable?

2) Alternatively, if you are comfortable with your current amount of Debt, you can reduce the amount of your Equity by that 2.5 percent, or in this case, from 16 percent to 13.5 percent (which is about a 15-percent reduction in Equity). You can do that by retiring or offering to retire some of your shareholdings, or just not issuing new stock this year.

What good comes from having less Equity outstanding? With fewer shares outstanding, it means that your "profit per share" should also go up by that same 15 percent, presumably making your shares more valuable.

Reducing the amount of Equity you need to operate the firm has yet another big advantage for employee-owned firms. It makes it easier to transition ownership internally. One of the biggest challenges to employee-owned E/C firms is the outflow of capital that occurs from paying out a retiring employee shareholder. And the more Equity that is in a company, the greater the amount of capital needed to repay a given percentage of shares being retired. In other words, the lower the ratio of your Equity to Revenues, in general, the easier it is to buy back stock from retiring shareholders because there is less of it to buy back. Hence, managing your Balance Sheet helps a firm internally transition its shares for the next generation, rather than bringing in outside equity, borrowing more money, or having to sell out to another firm.

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