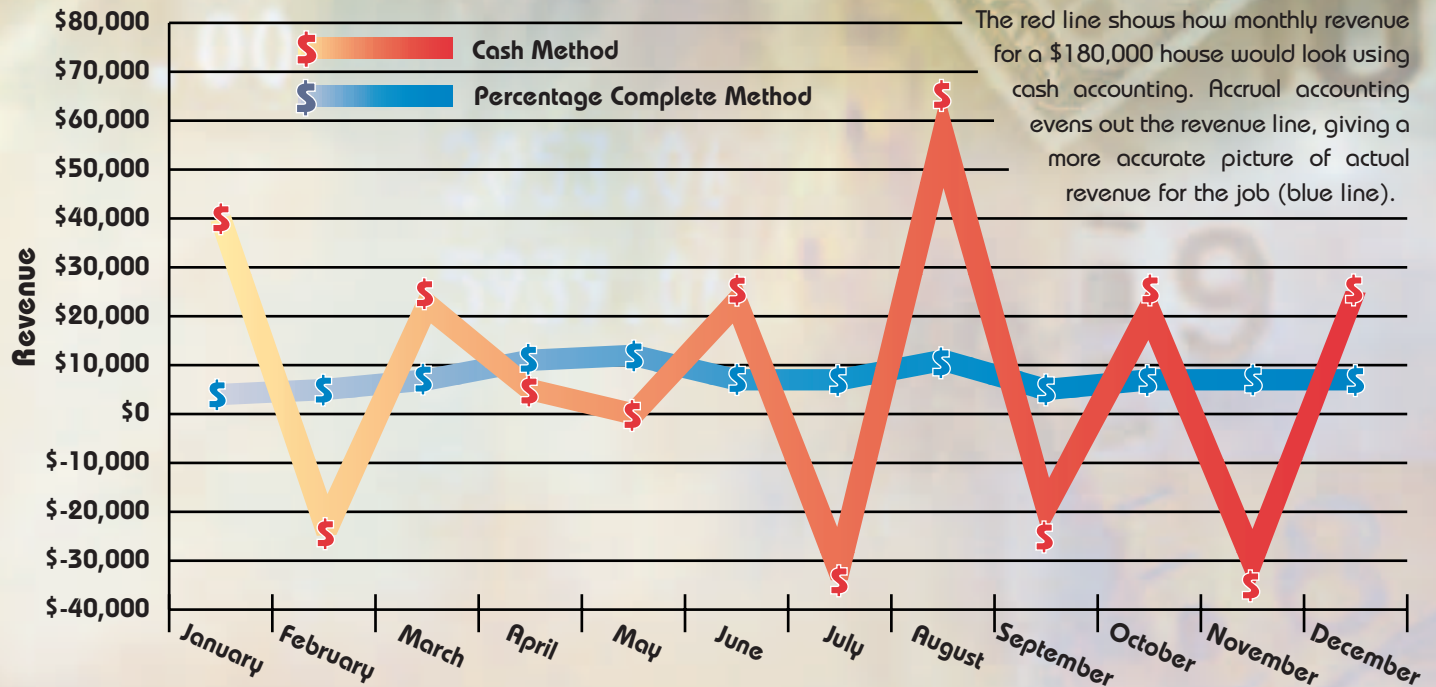


Tracking YOUR Profit



Many small builders rely solely on cash accounting, and limit bookkeeping updates to what is spent and received in a given month. But the unevenness of construction cash flow can leave you with a distorted picture of your true profit or loss.

by Don Reynolds

Accrual accounting, on the other hand, is designed to recognize revenue or sales as they are earned, regardless of when they are billed or when payment is received. It also recognizes expenses when they are incurred, which does not always coincide with the receipt of an invoice or payment of a bill. This method gives you a much more accurate financial picture by showing the amount of profit you actually earn as the work is performed.

Earnings and Cash Flow

Your true financial results for any given month are linked to the amount of work being completed that month, not to your checking account balance. Revenue earned from your contracts includes funds destined to pay the actual con-

Don't wait for the end of the job to find out if you're making a profit

struction expenses, which results in the gross profit. Overhead costs deducted from gross profit determine the amount of bottom-line net profit or income you have earned from running your business.

But tracking earned revenue in order to determine your true financial performance is not the same as projecting cash flow.

Many contractors contend with draw schedules based on arbitrary percentages developed by bankers who don't always associate job costs with progress. Consequently, owner payments may not keep up with the progress of the work. Windows ordered and paid for this month, but that are not on the draw schedule until they are installed next month, can create a temporary cash shortage — and the feeling that you haven't made a dime.

On the other hand, a contract deposit received before work has begun can leave you with a lot of cash on hand that is not yet earned. If you spend it on overhead, you'll be in trouble when the bill for the framing material arrives and you can't quite cover it.

In this article, I'll explain the basics of a simple internal reporting system known as the percentage complete method, or PCM, that you can implement to give yourself a more accurate picture of your financial status. This method of accounting is based on the amount of work completed month by month on your building contracts; it allocates revenue as it is earned and construction expenses as they are incurred, over the life of the project.

Comparing Cash and PCM Methods

The best way to demonstrate the advantages of PCM over cash accounting is to compare the results of the two methods.

I'll use an example of three custom homes to be built during the next calendar year. For simplicity's sake, we'll assume that each house costs \$150,000 to build and has a contract price of \$180,000, leaving a projected gross profit of \$30,000 per house. Each house will take five months to complete. Start dates for construction are staggered and schedules overlap. The contract price for each house will be paid in three equal draws.

Finally, assume the construction costs incurred for each house are \$20,000 in Month 1, \$25,000 in Month 2, and \$35,000 in Months 3 through 5.

The cash method. Using the cash-based system, you would recognize rev-

Table A Tracking Revenue with the Cash Method

Month	Revenue			Total	Monthly Costs	Monthly GP	Cumulative GP
	House 1	House 2	House 3				
Jan	60,000			60,000	20,000	40,000	40,000
Feb				0	25,000	(25,000)	15,000
Mar	60,000			60,000	35,000	25,000	40,000
Apr		60,000		60,000	55,000	5,000	45,000
May	60,000			60,000	60,000	0	45,000
Jun		60,000		60,000	35,000	25,000	70,000
Jul				0	35,000	(35,000)	35,000
Aug		60,000	60,000	120,000	55,000	65,000	100,000
Sep				0	25,000	(25,000)	75,000
Oct			60,000	60,000	35,000	25,000	100,000
Nov				0	35,000	(35,000)	65,000
Dec			60,000	60,000	35,000	25,000	90,000
Totals	180,000	180,000	180,000	540,000	450,000		

Using the cash method to track revenue from three projects yields wildly erratic results in the monthly GP, ranging from a "profit" of \$65,000 in August to a "loss" of \$35,000 in both July and November.

Table B Tracking by Percentage Complete

Month	Revenue			Total	Monthly Costs	Monthly GP	Cumulative GP
	House 1	House 2	House 3				
Jan	24,000			24,000	20,000	4,000	4,000
Feb	30,000			30,000	25,000	5,000	9,000
Mar	42,000			42,000	35,000	7,000	16,000
Apr	42,000	24,000		66,000	55,000	11,000	27,000
May	42,000	30,000		72,000	60,000	12,000	39,000
Jun		42,000		42,000	35,000	7,000	46,000
Jul		42,000		42,000	35,000	7,000	53,000
Aug		42,000	24,000	66,000	55,000	11,000	64,000
Sep			30,000	30,000	25,000	5,000	69,000
Oct			42,000	42,000	35,000	7,000	76,000
Nov			42,000	42,000	35,000	7,000	83,000
Dec			42,000	42,000	35,000	7,000	90,000
Totals	180,000	180,000	180,000	540,000	450,000		

The percentage complete method, in contrast with the cash method in Table A, yields a much more realistic picture of monthly GP, tying it closely to the amount of actual work being completed each month.

enue when the draws are received, and record expenses when they are paid out. Using this data, your financial statement would look like Table A.

This schedule shows financial results ranging from a \$35,000 "loss" in July and again in November, to a "profit" of \$65,000 in August. Trying to make decisions based on these figures is difficult at best, and potentially dangerous to your financial health.

The percentage complete method. By restructuring the revenue stream using the amount of costs incurred to determine the percentage of work completed, a much more realistic income figure is reported, as shown in Table B.

This schedule shows a much more accurate view of your business. Gross profit earned now ranges from \$4,000 to \$12,000 per month, and an accurate picture of your true net earnings from month to month is now possible. Note that the column totals are the same — we are simply waiting to recognize revenue and expenses until the work has actually occurred.

The percentage complete method (PCM) provides a more accurate representation of the financial picture of your company. In reality, you do not make a huge amount of money in one month, only to lose it in the next month, as the cash-basis statement shows.

Consider the difference in the business decisions you would make using a cash-basis method versus PCM. For

example, how would losing \$25,000 versus having a profit of \$5,000 in February affect your decisions to buy some new equipment? The chart of revenues on page 1 highlights the differences between the two methods.

How to Measure Job Completion

You will need to reorder some of your job information to fit the PCM method. Your first task is to decide how to calculate the percentage of work completed on your contract at the end of each month. The two accepted calculation methods are input-based and output-based. Input-based simply means you are measuring an item depleted or spent to get the job done, such as the number of hours worked or actual construction costs. An output-based method establishes the percentage of project completion by using a measurable unit of output, such as the number of floors in a building.

Input-based methods are the most common; the easiest one to use being the cost-to-cost method. With this method, the completed percentage is calculated by comparing construction costs incurred to date with the total estimated contract cost for the entire project. For example, if you estimated total project costs to be \$100,000, and you have spent \$30,000, then you would recognize $30/100$ or 30% of the contract price as revenue. This is the method used to calculate the revenues shown in Table B.

How you estimate the amount of work completed depends on you and how you run your business. A subcontract for excavation, started and finished within the month, will be easy to measure. A framing contract that runs through two consecutive months may not be as easy. It's up to you to use an estimate that is substantially correct — for example, if half of the lumber pile is gone, you could consider the framing 50% complete.

Calculating Revenue

To determine the amount of revenue using the cost-to-cost method, first calculate the percentage of the project completed and then multiply it by the contract price.

$$\begin{aligned} & \text{Percentage Completed} \times \text{Contract Price} \\ &= \text{Revenue Earned to Date} \end{aligned}$$

To understand how this works, let's return to the custom home numbers in Table B. The contract price is \$180,000, and the estimated construction costs are \$150,000. During Month 1, you incur construction costs of \$20,000. Using the cost-to-cost method, you would show $\$20,000/\$150,000$ or 13.3% of the job as being completed. Using this formula, you would have earned the following revenue:

$$13.3\% \times \$180,000 = \$24,000$$

With \$24,000 in revenue and \$20,000 in expenses, you have earned \$4,000 in gross profit. Note that you have actually received \$60,000 in your first draw, as illustrated in Table A. With \$40,000 left in the bank, a false sense of security could develop, and you could find yourself writing out a check for that new pickup. Using PCM, reality reinstates itself — you actually only have \$4,000 available, and that pickup is going to have to wait.

In Month 2, you incur \$25,000 in costs, which would equal 16.7% of the total project costs. This means that you have earned a total revenue of \$30,000 for the month ($\$180,000 \times 16.7\%$) and \$5,000 in overhead and profit (\$30,000 minus \$25,000). Should your costs

IRS Requirements for Accrual Accounting

At this time, the IRS has made the percentage complete method and accrual accounting a mandatory reporting requirement for construction companies with average annual gross receipts of \$10 million or more for three consecutive years. They want taxes paid on all earned income, after all expenses have been recognized — even if the income hasn't been received yet.

Even though it is not required of most small builders, it is worthwhile to check with your accounting or tax professional to see if this method could reduce your tax obligation. Should you choose to use the accrual system and PCM for your internal accounting system, it does not have to be used on your tax return. You can still file using the cash-basis method, if this is easier or more favorable for your situation.

come in higher than initially predicted, the effect on your net revenue is immediately apparent.

Cash flow phantoms. There are significant differences in cash available and revenue earned. By combining the first and second month's activity in Table B, you have \$54,000 in revenue earned, based on the amount of work completed; \$45,000 in expenses incurred to date; and \$9,000 in gross profit earned. But you received \$60,000 at the beginning of the project, so your checking account balance is still overstating your position by \$6,000. This is the deceptive picture painted by the cash method, and spending that \$6,000 without understanding where it belongs is a trap too many contractors fall into.

In order to complete this financial statement, we need to finish calculating how much work is completed on each house for each month. Using the equation outlined above, we get the results in Table C.

Using these percentages, we can accurately calculate monthly revenue, as shown in Table D.

Formal Accounting Statements

The percentage complete method can be used to quickly and accurately analyze your business. For most contractors, a simple statement like the one in Table B is all that is needed. These reports can be completed by hand, or by using a spreadsheet program, such as Microsoft Excel. For larger contractors with more projects to track, a more sophisticated version should be implemented that utilizes finer detail for even greater accuracy.

Using PCM when developing your accounting statements can provide some benefits, such as increased equity in your business. There is additional bookkeeping work involved and specific accounting rules that must be followed to create an accurate picture. For example, your estimates of the work completed must be reasonably accurate and documented with certain contract requirements in place. Check with your accountant to determine if this method would be beneficial to you.

Table C
Calculating Percentage Complete
(For each house in Table B)

Mo.	Cost Incurred	Estimated Cost	Percent Complete	Increase
1	20,000	150,000	13.3%	13.3%
2	45,000	150,000	30.0%	16.7%
3	80,000	150,000	53.3%	23.3%
4	115,000	150,000	76.7%	23.4%
5	150,000	150,000	100.0%	23.3%

To calculate the percentage of the job completed, divide the total costs incurred at the end of a given month by the estimated total cost of the project. The last column shows the percentage of the project completed in that month.

Table D
Calculating Monthly Revenue
(For each house in Table B)


Mo.	Percent Complete	Contract Amount	Cumulative Revenue	Increase
1	13.3%	x 180,000	= 24,000	24,000
2	30.0%	x 180,000	= 54,000	30,000
3	53.3%	x 180,000	= 96,000	42,000
4	76.7%	x 180,000	= 138,000	42,000
5	100.0%	x 180,000	= 180,000	42,000

Multiply the percent complete figure by the total contract amount to calculate total revenue for the month. The increase represents the amount of gross profit earned each month.

Monthly Updates to Your Income Statement

The percentage complete method is applied on a job-by-job basis, so you will need to collect cost and revenue information for each job. Professional accountants often use an in-progress job report that lists costs incurred, expected costs, revenues collected, and total contract revenue by job.

Using this reporting method, the importance of job-site schedules and the full effect of delays will be easier for you

to pinpoint. With one project behind schedule, and one project ahead, you can instantly see what effect these changes have on your monthly earnings. The effect of cost overruns are immediately apparent, and working through these problems when they occur, instead of at the end of a project, will keep your business healthy and your mind at ease. 

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