THE SIX NUMBERS THAT SHOW IF YOU'RE MAKING A PROFIT; OR WHY WE NEED TO BE GRATEFUL TO KEN LAY

Farm Management

P.J. van Blokland Department in Food and Resource Economics, University of Florida, USA Email: pjvb@ufl.edu

J.J. Haydu,

Department in Food and Resource Economics, University of Florida, USA Email: pesacre@ufl.edu

Abstract

All farm firms, big or small, must manage four different and often intertwined conflicting parts. These are production, marketing, human relations and finance. It's probably fair to say that in most farms, production is the fun part and finance is the stuff that's left to bookkeepers. This is unfortunate because the financial part of the farm plays a larger role in firm success than ever before. This is largely due to the increasing importance of timeliness in the decision making stemming from the farm's financial performance in an increasingly competitive environment, both domestically and overseas. It is also sad, but typical, that the essential financial numbers tend to arrive back from accountants long after the owners should have acted on them. The main reason on many farms is that accountants tend to concentrate on taxes, while owners should focus on financial management decisions, which usually require different numbers. This paper attempts to clarify the mystery of, and ignorance about, all those essential financial statements, by selecting six simple financial management numbers that are timely, that owners can follow easily and therefore improve both their farm decision making and their competitive advantage. The numbers are subjectively ranked in the authors' views of their importance. These ranked numbers are 1. the firm's cash and its availability. Cash pays the bills and is the fuel that drives the farm's finances. 2. net income and how it is used. Net income, or profit, pays for new farm investment, retires principal and provides salaries to the farm's owners. 3. earnings before interest and taxes, otherwise known as EBIT. This indicates whether the farmer should reduce debt now and therefore lower future interest payments, or invest in a depreciable asset to reduce taxes, or simply accept the number. 4. leverage, which helps in debt management, and shows how much debt the farm owes for every \$1 that it owns. 5. the farm's main cash costs. There are rarely more than five major expenditures on any farm, and these account for at least 75% of the farm's cash costs, and therefore perhaps 60% of the farm's total costs. 6. sales, rather than total revenue. Sales provide cash and total revenue may, and often, does not. The paper emphasizes the simplicity of firstly finding these numbers and secondly, using them as trends for decisions. It illustrates the types of decisions in each of the six categories and shows their importance in subsequent firm management.

Keywords: Finance, decisions, timeliness, cash, profit, costs

Introduction

The late Kenneth Lay, of Enron fame, probably did small business owners and investors like us a favour. We all would rather concentrate on producing things, which we understand, and gloss over the firm's financial numbers, which we usually don't. Mr. Lay illustrated just how dishonest these numbers can be, simply by juggling some of them around and altering and ignoring others. The result was that everyone, including overpaid market experts at banks and brokerage houses, assured us that Enron was doing well when it was doing precisely the reverse. So, if smug experts can be wrong, why should that be reassuring to us?

Simply because it should encourage us to look at some of the numbers a little more critically to see what they really are telling us. The purpose of this paper is to emphasise what we should look at and thus what we might sometimes ignore. For it is fair to say that several of our accountants' numbers are often not that useful to those operating a firm, particularly when we get them nine months or more after we sent the data in. What we do need are quick and easy numbers that show the firm's progress now and from these numbers, whether we are doing things right or wrong now. This gives us time to change directions if we need to. Therefore we probably need to get these numbers ourselves rather than rely solely on experts, sluggish, dishonest or otherwise.

These quick numbers give us a focus and obviate the need to peer vaguely at a plethora of stuff we don't understand. Accountants' numbers are, of course, useful. They fulfil legal requirements, produce coherent, uniform financial statements and handle our tax burdens clearly and concisely. But they, unavoidably, use terminology that occasionally tends to obfuscate rather than clarify firm management. So, often to our detriment, vide Kenneth Lay, we skip over them.

The Basic Indicators

There are certain numbers, which we will call "indicators" here, that tower in importance over the rest. All of them should be considered as they appear in trends. So we would look at the trend rather than the stand alone number. Finally, no one indicator can stand alone as the definitive sign of firm success, if other numbers are bad. I will use simple numbers to illustrate these indicators as they are usually easier to follow than realistic ones.

Cash Indicator

The most important number in the firm is the amount of cash that the firm produces. Cash is to the firm as blood is to the body. It is that simple. We need to emphasise cash and exclude receivables, which are not cash, although they hopefully will be eventually. Agribusiness is notorious in allowing receivables to run far longer than other firms allow. In fact, it is an excellent idea to increase the firm's cash by encouraging early settlement through discounts as most industries do. A fairly common one is to discount the bill 2% if it is settled in 10 days and to impose penalties if it is not settled within 30 days.

Cash does six things or, more properly, shows whether we have enough cash to do all or some of these six things. (1) Cash pays bills, or the payables in accounting parlance. It also pays (2) taxes. It meets (3) debt payments of principal and interest. It also pays (4) owners' salaries, shows whether we can afford to (5) replace used up assets and (6) to expand the firm by investing in new assets that increase the firm's size. It is the single most important indicator of business success. Having cash allows the firm to do things that it could not do otherwise.

Look at the six uses again. They are basically listed in order of necessity. We have to meet payables (1), to stay in business. Likewise we settle taxes (2), to remain legitimate. We can postpone or re-schedule debt (3), if we have to, but will eventually have to pay it off. If there is a cash shortage, owners must reduce their living standard by cutting back on salary (4), something that Mr. Lay was not good at. Similarly, if we don't have much cash we cannot replace assets (5), nor expand by investing in new ones (6). If we do have cash then (3) through (6) can make us all feel good. Thus cash is the number one sign of success.

The amount of cash in a firm is shown as part of the current assets in the latest balance sheet and its future inflows and outflows should be detailed in the firm's cash flow for the next year. But perhaps the simplest way to count it is to keep the check book and savings account up to date and see if this total is similar to what the cash flow shows for that time.

Net Income, Or Earnings

The second basic number is the net income, which also means earnings, or profit. The bigger this is, the better, and the faster it grows, the better the firm is doing. It is found as the bottom line on income statements and is therefore considered as accumulative, which it is. So, if earnings are listed as \$100, the conception is that there is \$100 available to collect. This is not true. Being accumulative does not mean that it just sits there. Nearly all of it has been allocated to one or more of the three things that earnings are spent on during the time the income statement represents. This is usually a quarter, and most of our earnings have been spent during that quarter, so \$100 represents what has been spent *and* what is left over.

Earnings go on (1) principal, (2) re-investing and (3) owners' salaries only. All other expenses have been settled earlier in the income statement. Assume that the \$100 earnings are allocated 20% to principal, 40% to re-investing and 40% to owners' salaries respectively. Principal is usually paid monthly so at least two if not all three months' principal has already been met. Therefore most of the \$20 has already been spent on paying principal. Owners need living expenses regularly rather than waiting for a lump sum every quarter, so some more of this has also already been spent. Thus most of its \$40 allocation is no longer available.

Re-investing is the amount of earnings that are spent on new assets that increase the size of the firm. For example, if we buy a third truck when we only had two before, the firm's size has increased by one truck and this is classified as re-investing. Replacing one truck is not. Buying additional land also is re-investing. So is keeping re-investment money in cash because it increases the amount of cash we have. Thus, with the \$40 available, we bought a truck for \$10, land for \$20 and kept \$10 as cash. All three items are re-investing, because the firm grew in size.

The allocation of earnings often separates the good from the poorer manager. It is not easy to do because we have to essentially decide before we know how much profit the firm will earn. But there are a few commonsense guides. The more that goes on one item the less there is available for others. So, we should pay ourselves first and principal last, leaving the remainder for re-investing. It obviously depends on the firm's situation and the ages of the owners, but the allocation portrayed above of 40% to owners, 40% to growth and 20% to principal is often a good guide.

Earnings before Interest and Taxes, or Ebit

EBIT is a useful decision tool. It is found just above the net income line in the income statement. The larger it is the better, and the faster it grows, the nicer for the firm. It shows what the firm has left to pay in interest and taxes before earnings. For example if EBIT is \$120, there are \$20 available for these two items, before the earnings of \$100.

If EBIT seems high then we may decide to pay off our debt faster, i.e. increasing principal payments from earnings, thus reducing future interest charges. Or we could buy a depreciable asset that we need and thus reduce our taxes by the depreciation of that asset. We should emphasise the word "need." It is rarely sensible to buy something that just reduces taxes but is not particularly useful for the firm. Either or both actions will affect subsequent earnings, so see what earnings need to be before taking action.

We also need to know if we are already managing our debts well and realize that if we are paying taxes, we are also making money. So it could be sensible to simply continue with what we were doing, pay the \$20 and pass the remaining \$100 on to earnings. This is as much of a decision as the two former are. Looking for tax reductions qua reductions only, is usually a poor way to invest.

Leverage

This is an extremely useful and simple tool to check on debt management. It is calculated by dividing the firm's total debt by its equity. Both these numbers are found on the balance sheet. Debt shows what we owe and equity shows what we own. So if the ratio is 2 to 1, this means that we owe \$2 for every \$1 we own. The actual number will probably depend more on the age of the owners or the firm than anything else, but it is still useful. An increasing trend shows a firm with increasing risk.

We expect that younger folks will have higher leverage ratios than older ones. Young owners usually need relatively large amounts of debt capital to start and run their firms. Older owners generally wish to reduce their debts to perhaps zero. So it would not be a good trend for owners in their sixties to see their leverage increase, while this may be perfectly ok for owners in their 20s. Thus the decision is, what do the owners want it to be? Having decided, they should then monitor their progress to attaining it.

As a generalization today, established agriculturally based firms would not want their leverage to be much above 1. However, in today's volatile markets, one disaster can change this significantly. So, follow leverage regularly. Trends in leverage indicate the firm's debt direction, which should be the same that the owners want it to be. If not, take action. Debt is very much a two edged sword. It rewards you when things go well i.e. when returns are greater than the costs of borrowing money, at, say 12% and 7% respectively. But it will slay you when things reverse e.g. when the costs (6%) outweigh the returns (-5%).

Cash Costs: The Big Five

Cash costs are the costs we pay for with cash. They are by far the majority of practically all firms' costs in both number and percentage of total costs. In a typical agribusiness firm they will account for 75% or more of all the firm's costs. Examples include hired labour wages and FICA, interest, fertilizer, chemicals, fuel, repairs, insurances and licences, seed, feed, rent and other cash expenses. All of them are found in the income statement and in the cash flow. This may seem a rather large bunch of costs to combine together but there are two good managerial reasons for doing so.

The first is simply because we pay cash to settle these items and we have already established the importance of cash for the firm. That's why the cash flow is the most important financial tool for the manager. It shows when cash comes in and when it has to leave the firm. The above items are examples of cash leaving the firm. So we need enough cash at the right time to settle these bills.

The second is that in any agribusiness firm there are probably four or five cash costs that add up to 70% to 80% of the total cash costs. Thus we should focus on these cash costs rather than trying to cover them all equally. For example, row crop farms will probably name fertilizer, chemicals, feed, seed and fuel as their main ones while vegetable growers might select labour, utilities, chemicals and machinery operations as theirs. If we are trying to reduce costs, knowing the main ones and their trends as a percentage of all cash costs, will help our focus. So, if chemical usage grows from 20% to 25% to 30% over a three year span we should either be able to justify its increased importance, or ask why, or think of ways of reducing it.

In summary, cash costs are by far the most important of any firm's costs. There are a few of these costs that dwarf the rest and we should concentrate on these. The easiest way is to express them as a percentage of all the cash costs and track variations in these percentages over time. Look for an explanation before acting. Labour costs and fuel costs have risen for reasons outside our control and, if we are already pretty efficient, there may not be much we can do about them, beyond substitution. For example, introducing mechanical harvesting rather than hand picking, that will reduce labour but increase energy costs.

Sales, Not Total Revenue

If a firm's sales are increasing this is almost always good news. The same cannot be said for total revenue, also known as gross output, although it is commonly utilized as a sign of good news. Both are listed in the firm's income statement. Total revenue is the sum of sales, other firm income, changes in inventory and changes in receivables. Sales normally dominate this entry and in agribusiness firms, they are often 90% of total revenue. But not always and that's where the problem lies. The above changes refer to the difference between the values of the items at the beginning and the end of the quarter. This is the source of the problem and why we must concentrate on sales.

For example, suppose that the income statement shows inventory change over the quarter to be \$30. This means that either the value of the existing inventory or the increased amount of inventory, or some of both, increased value by \$30. This sum increases total revenue by \$30. The same argument applies to receivable changes. Now suppose that there were no sales during the quarter, so that all the production went into unsold inventory. Our total revenue is therefore \$30 (assuming no receivable changes or other firm income). If the total revenue from the previous quarter was \$20, our revenue has increased by \$10 or 50%, which looks like good news, without any help from Ken Lay.

But it is not good news. None of the inventory is sold so we have received no cash for a quarter. Inventory costs will increase and nothing is coming in to meet these increased costs. The scenario is not fanciful, particularly in the ornamental and nursery firms, which, almost by definition, carry inventories that often match their sales. The message is to follow sales, with perhaps a corollary that we should follow inventory accumulations at the same time. Inventory management is not an easy science, especially in a small business. Just realize that inventory does not pay any bills. Sales do.

Conclusion

Financial statements, like balance sheets, income statements, statements of owner equity, proformas and cash flows are very useful statements to report firm performance and anticipate future performance. But there are a few short cuts that can help busy owners keep up with what's been happening in the firm, what should be monitored regularly and, with the cash flow, aid considerably in where the firm may be in the future. These have been discussed above and presented in preferential order. They are cash, earnings, EBIT, leverage, the main cash costs and sales. If we follow these regularly, we shall be sufficiently informed for the majority of our daily operations in running the firm. And this, in most cases in small agribusinesses, is a great change over what normally happens, which is simply operating and marketing and generally neglecting the firm's finances. For an even shorter cut, think and follow cash and we will probably succeed. If Kenneth Lay had, Enron would still be operating today.