

Business Valuation

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When it comes time to sell your business, you might have no idea how to proceed. You might go about pricing your businesses with methods that are unsound (sometimes being literally no more elegant than a “formula” they jotted down on the back of a business card in a smoke-filled breakfast diner!). As a result, you might either grossly overprice your business (and then get offended when you are offered what the company is *really* worth) or you badly underprice it (and thus fail to get the money they should have for your efforts).

By far, the biggest problem is with overpricing companies. Indeed, according to Ian MacLachlan, the president of The Business Team in San Jose, California, “The real problem is with the seller who won’t listen to reason when pricing the business.”

So here are the 8 dumbest ways to try to sell your HVAC business.

The Eight Dumbest Ways to Sell Your HVAC Company

This is the mistake of setting a price for your business based on how much money you’ll need for what you are planning next in your life. It may be \$800,000 for retirement, or \$200,000 to start a new venture, or it may be to fly to the South Pacific and life under palm trees in warm ocean breezes, sipping Mai Tais and eating fresh fruit. The problem is that this has *nothing* to do with what your business is worth right now! Your after-sale intentions may be noble and good, but why should you expect any *sane* buyer to pay what you’re asking just so you can do your next life project? This approach is seller based, no buyer based, and has about a 1% chance of succeeding! And if you do get an offer, it is likely to be well under what you want for the firm, so you’re going to get mad at the buyer.

1. Gosh, I’ve never been to Bora Bora before!

2. Heck, I've put a lot into this baby! I want it all back now!

So why should the buyer give a rip? That's your problem, not his! As business valuation expert Susan Pravda of the Boston firm Epstein, Becker & Green says, "Sellers often make the mistake of equating market value with cost. But there is only one test of value: the cash-generating ability of the business."

3. I owe, I owe, so it's on the block I go...

Selling your business just to get yourself out of debt (commercially or privately) is never a good motive for selling your business! The buyer will be thinking, "Why should I pay for *your* stupid business decisions?" And if you can find a buyer dumb enough to buy it for that excuse, you probably won't get what *you* want for the deal. If you're in debt, restructure your company so it can start printing dollar bills and work down the debt before you try to sell.

4. Well, because I want a zillion bucks! You got a problem with that?

Sometimes called the WIFL method (for "whatever I feel like"), this method puts a price on the company that is nothing short of pure caprice and whimsy. Owners who elect to use this method are blind to its stupidity (and theirs) and doggedly cling to it even when they are shown that it is *not* a reliable method for pricing the business.

5. It would cost half a mill to start this thing from scratch!

Maybe. But so what? What if it costs \$500,000 to reproduce the firm's assets, but it's market value as a *business system* is only \$200,000? Who would buy *that*? Would *you*?

In other words, “We *meant* for there to be profits in this business, but...” It’s like saying, “This is a non-profit business. It was not planned to be that way. But it is a non-profit business.” You might get something for the assets and customer list, but that’s about it. What about all those hours, days, weeks and years of sweat you poured into that business to build it? Is that worth nothing now? (It will be to a buyer!) Your best bet is to build a profitable machine and *then* sell it.

**6. “Explosion?
What explosion? I
didn’t hear an
explosion! Did you
hear an explosion?”**

If you set your price based on a revenue stream, the buyer is buying not only that stream, but also the means to produce it. Tacking on something extra to cover the value of the revenue stream producing assets is like selling a car and then charging extra for the key!

**7. “ Lessee... here’s
my price. Now I’ll
just add for the
fixtures and
equipment and....”**

Using a price you were offered in the past when you weren’t officially “for sale” has no bearing on what your firm is worth in *today’s* market place. This also goes for comparisons to others you know who sold in the past. (For instance, maybe you gave the former owner of *your* business \$100,000 for it twenty years ago. Just selling for \$100,000 adjusted for 20 years of inflation, at an average of 6.5% a year, or \$350,000, is no way to sell it today!)

**8. “ Stew said he’d
give me \$800,000
for my business!
Lemme see, that
was what? 19..77?”**

Admittedly, some of these 8 dumb ways were exaggerated to illustrate the point, but did you recognize anyone you know in these scenarios?

You should learn sound ways to price a business, and to ask a price that is reasonable, justifiable, and fair to you (it rewards you

**There’s Got to
Be a Better
Way!**

**There's Got to
Be a Better
Way! (Con't)**

well for all your work) and to the buyer (it does not make him or her pay "too much for the whistle").

This discussion is an *overview*, not a detailed course on business valuation! Business valuation is an extremely difficult and technical subject and cannot be taught in a few minutes no matter how good the instructor and bright the learner! Business valuation is a combination of science (primarily accounting) and art. In no way are you to assume that reading this section makes you a qualified expert on valuing your own business. *In all cases, you should hire a qualified business appraiser to formally and accurately help you set a selling price.* Anything else really amounts to just one of the 8 dumb ways you just read about.

Hire a Pro!

Professional appraisers usually belong to one or more professional organizations. Contacting these organizations can often help you locate professionals in your region who can assist you in making a fair market value determination of your business's worth. There are three organizations we can recommend:

The Institute of Business Appraisers
PO Box 17410
Plantation, FL 33318
Phone: 954-584-1144
Internet: www.go-iba.org

The American Society of Appraisers
555 Herndon Parkway, Suite 125
Herndon, VA 20170
Phone: 703-478-2228
Internet: www.apo.com

The Appraisal Foundation
1155 15th Street NW
Suite 111
Washington, DC 20005
Phone: 202-347-7722
Internet: www.appraisalfoundation.org

In some respects, you sell your business the same way to sell your products and services to your present customers. You....

- price it
- look for the right buyer
- close the deal

But it is also, of course, much more complex than that.

Let's begin with what we'll call "Harshaw's First Theorem". It reads like this:

The recent profitability of your business will have a large impact on the way to value the business and hence the kind of buyer you'll seek.

As you'll soon see, if recent earnings trends are on an upward path, it makes sense to use one valuation approach over the others; conversely, if recent trends have been downward, it makes more sense to use a different valuation method.

Harshaw's First Theorem

It may surprise you to learn this, but there are at least 13 major valuation techniques recognized by business valuation experts (as determined by case law and tax court rulings), and within those 13 techniques are many variations. The number of permutations and combinations is bewildering, but it all boils down to this—the valuation technique selected should be used to maximize your profits while staying within the boundaries established by precedent and case law. This is not to say that you could not sell your business for *more* than what a particular valuation method suggests—after all, P. T. Barnum is credited with saying, "There's a sucker born every minute." But if you want to set a price that could survive an IRS audit or a challenge in court, you'd better stay within accepted guidelines. It's just that those guidelines are fairly broad. Some are better suited for certain situations than others.

So Many Choices, So Little Time!

<p>Gerber's Axiom</p>	<p>A corollary to Harshaw's First Theorem is what we call Gerber's Axiom, in honor of Michael Gerber, small business consultant and author. Gerber's Axiom reads:</p> <p style="text-align: center;"><i>The kind of buyer you seek will influence the valuation approach you select and hence the price you'll get.</i></p> <p>In his best-seller <i>The E Myth: Why Most Small Businesses Don't Work and What To Do About It</i>, Gerber develops a theme that is dead right on in the HVAC industry. In essence, Gerber says that small business owners— <i>any</i> small business owners, not just HVAC owners— fall into one of two broad categories: technicians and entrepreneurs. A technician is, in our trade, an HVAC business owner who has come up through the trade and learned how to do the business “with his hands”. In most cases, he (or she) was at one time a service technician or lead installer for another company. And then one day, while driving the company vehicle back to the shop after a service call or installation, he is struck by what Gerber calls the <i>Entrepreneurial Seizure</i>. In other words, he gets the brilliant flash to start his own business.</p>
<p>The Entrepreneurial Seizure</p>	<p>At first, everything is great! He is his own boss, he calls his own shots. But eventually his business starts to grow and the day dawns when the fun is gone, the joy has left, and he lies in bed after the alarm goes off at 5:00 a.m., blinking at the ceiling, and trying to put into words what his gut is feeling. What his gut can't say, and his brain can't quite express in words, is a realization that stares at him like the gnarled face of one of Spielberg's dinosaurs from <i>Jurassic Park</i>, a realization that is so close he can smell its fetid breath, but for which he has no coping mechanism, no way to understand his dilemma. As Gerber so eloquently puts it, he falls prey to The Fatal Assumption.</p>
<p>The Fatal Assumption</p>	<p>In Gerber's words, “That Fatal Assumption is: <i>if you understand the technical work of a business, you understand a business that does that technical work...</i></p>

“And the reason it’s fatal is that it *just isn’t true*. In fact, it’s the root cause of most business failures!

“The technical work of a business and a business that does that technical work *are two totally different things!* But the technician who starts a business fails to see this. To the technician, a business is *not* a business but a *place to go to work*.”¹

The Fatal Assumption (Con’t)

But just facing the Fatal Assumption does *not* mean that you have succeeded in leaving the Technician Camp and entered the Entrepreneur Camp. An entrepreneur is a visionary person, one who sees the market in terms of opportunities and businesses as ways to address those opportunities profitably. An entrepreneur may not know beans about the HVAC business, but he or she has a keen sense for what will work in the market and builds an HVAC business that is wildly successful. Perhaps that describes you.

Better yet is if you began your business as a technician and later learned how to become an entrepreneur. You have the blessing to know not only *what* to do with your business, but *how* to do it in such a way as to make money and build something that could eventually function well on auto-pilot for quite a period of time.

What is an Entrepreneur?

So how does this affect how you sell your business? Simple. If you are a technician, you are going to tend to see your business in terms of the technical trade. You’re going to see assets and customer lists and inventory. You will tend to find buyers who think along the same lines, people who are looking to acquire your assets and customer list and inventory. You’ll probably find an *asset valuation approach* to be the best for you.

But if you are an entrepreneur, you’ll see your business as a machine that prints money. You’ll tend to value it with a *revenue stream approach* and will by default seek out buyers who are looking to purchase a machine that prints dollar bills— *lots* of

So What’s the Big Deal?

¹ *The E Myth: Why Small Business Don’t Work and What To Do About It* by Michael Gerber. Copyright 1986 by Michael Gerber; published by Harper Business Books. Quote from page 10.

<p>So What's the Big Deal? (Con't)</p>	<p>dollar bills—and who are willing to pay what seems like a ridiculous sum (to a technician) to acquire that printing press.</p> <p>And here is why that is important: in most cases (but not all), revenue stream valuation approaches produce higher sell prices than asset valuation approaches.</p> <p>“Technicians” tend to undervalue their businesses and overprice them (based purely on asset valuation approaches), whereas entrepreneurs usually seem to find a good mix of value and price. Of the two, the entrepreneurs usually get more for their sales on a unit by unit basis than the technicians.</p>
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<p>The Trump Theorem</p>	<p>Finally, the way your business is valued will be guided in large part by what we call the Trump Theorem. The Trump Theorem states</p> <p style="text-align: center;"><i>The reason for your valuation will drive the way your business is valued.</i></p> <p>For example, if you are valuing your business as part of a divorce settlement, the value will be much different than if you are defending yourself from a minority stock holder who has sued you, or if you are setting up an employee buyout (such as an ESOP or buy-sell agreement).</p>
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<p>Standards of Value</p>	<p>The fundamental concept to bear in mind in all business valuations is the concept of “fair market value”. Every owner wants to sell his or her business for its fair market value. This is only right and proper. But what is “fair market value?” What’s fair to you may be robbery to another person! Fair market value has a very tight definition, as it turns out, thanks to the Internal Revenue Service. In Ruling 59-60, they define “fair market value” as...</p> <p style="text-align: center;">“... the amount at which the property would change hands between a willing buyer and a willing seller, when the former is not under any compulsion to buy,</p>
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and the latter is not under any compulsion to sell, both parties having reasonable knowledge of relevant facts.”

Standards of Value (Con't)

This standard of value is most often used in estate and gift tax cases and divorce cases, but can also be used for transition and acquisition purposes. (There are three or four other definitions of value used in business valuation, but their differences are extremely subtle and do not vary enough from the Ruling 59-60 definition to make their discussion worthwhile at this point.)

When a business appraiser makes a valuation, he or she will use what is called an “approach”. An approach is nothing more than a systematic method of computing a business’s value. There are three major approaches recognized today. They are:

Three Major Approaches

The Market Approach

This method is used normally for publicly traded companies and is of no use to privately-held HVAC companies. The premise is that if you wish to sell your firm, find a publicly-traded company (one whose stock is listed daily on one of the stock exchanges) like yours and see what its stock is selling for. If you know the number of shares of stock, you can compute the value of the comparison company. Then, comparing your company to it, you can set a fair price. But since no HVAC dealerships are publicly traded on the stock exchanges, to what should we compare you? This is why this approach is not recommended for our trade.

The Asset Approach

In this approach, the business is valued for what its assets are worth. This is the method usually favored by technician owners, but not normally favored by appraisers because a business is usually worth more than the sum of its parts. However, if your firm’s last five years have been poor ones, this may be a good approach to use!

The Income Approach

This approach assigns value based on the firm’s earning power. This is the approach used most often by most appraisers. It usually attracts buyers who want to buy a *business*, not a collection of things. They are interested in buying a money-

Three Major Approaches (Con't)	making <u>system</u> . Hence, it is the approach usually favored by entrepreneurial owners.
The Asset Approaches	First, let's begin with a fundamental postulate for all approaches to business valuation. <i>All</i> approaches assume accurately and correctly structured financial statements. In other words, if an appraiser finds that "the books" contain non-business "clutter" (such as a non-working wife's BMW lease or a "company" owned condo at Aspen), he or she must adjust the books for these non-business perks, expenses, and revenues, creating a set of books that truly shows what the <i>business</i> did during the period in question. This is sometimes called "recasting the books" and is a necessary first step in arriving at a reliable valuation.
Book Value	The first asset approach is called <i>book value</i> . In this approach, the business's value is simply the net worth (or equity) shown on the balance sheet. It is the least useful approach for the simple reasons that (a) assets are shown on the balance sheet at cost, and this usually has no correlation with market value, and (b) retained earnings can bloat the net worth beyond reasonable limits, and retained earnings have no bearing on present worth. Another pitfall of this approach is that it ignores recent revenue trends. Thus, a company that is rising in income would be penalized by this approach, while one that was in a nose dive would look better than it really is.
Adjusted Book Value	The second asset approach is <i>adjusted book value</i> . This is the most commonly-used asset approach. In it, all the assets and liabilities are valued at market value as of a certain date. You need to be aware that it is most often used for not-for-profit organizations and holding companies. It is not used to value service businesses, nor is it used to appraise intangible assets or minority shareholder interests. (Intangible assets don't normally show up on a balance sheet, and minority shareholder interests must be sharply discounted by a minority discount factor to

reflect the relative impotence that minority shareholders have in determining a company's fate).

A business appraiser will go through a lengthy and complex process of determining present values of assets and liabilities for this approach. It is not as simple as saying, "Gee, my assets and liabilities are probably worth about 75 cents on the dollar!" And for valuation purposes, the opinion of an auctioneer or liquidator is about as valid as that of a bull frog.

**Adjusted
Book Value
(Con't)**

The third asset approach is *liquidation value*. In this approach, value is based on the assumption that the business has a greater value if its individual assets are sold to the highest bidder (in an orderly sale) and the company ceases to be a going concern. Because appraisers must deduct liquidation expenses (such as commissions, taxes, legal and accounting costs), the liquidation value of the business is less than the liquidation value of its assets. Again, the opinion of an auctioneer or liquidator is of little use in this approach. Only an appraiser is really qualified to do the calculations.

Its main value lies in establishing what could probably be considered a floor or bottom price for your company, as it usually gives the lowest valuation of any method.

This approach might be used if your firm has had a dismal performance record of late, the assumption being that as a money maker, "it ain't." In that case, you're probably better off seeking a buyer with a technician's bent, because such a buyer will have a good eye for what the assets are worth, and won't care about what the *business* is worth (because, frankly, it's not worth much anyway).

**Liquidation
Value**

The fourth asset valuation method is *reproduction value*. In this method, value is based on appraising what it would cost to reproduce the firm today. As an approach, it usually results in an inflated price since it normally costs more to replace a used asset

**Reproduction
Value**

**Reproduction
Value (Con't)**

with a new one. And it is usually inaccurate because the value of a business lies in how it *uses* its assets, not just in owning those assets.

**“Cap” Rate and The
Income
Approaches**

The key concept with the *income approaches* is “capitalization”. Capitalization is the process of converting a benefit stream into value. In a purely mathematical sense, this is how we define it:

$$\text{Value} = \text{Benefits} \div \text{Rate}$$

The business’s value is assumed to be directly related to its profitability in relation to the risks involved. The expected profits are divided by a capitalization rate to arrive at a value.

The “cap rate” (as it is often called) represents the rate of return an investor would require based on the risks associated with the investment. It is found by dividing one by the rate of return desired.

Here is an example: If an investor felt that a 25% rate of return would be adequate to take on the risk of buying your company, the cap rate would be $1 \div 0.25$, or 4. You would then multiply the value of the benefits by 4 to get a selling price. If the buyer thinks your firm is riskier, he might demand 35% or more for his investment. For instance, he might demand a 50% rate of return, so the cap rate would be $1 \div 0.50$, or 2. Your selling price would now be half of what it was in the first case. Obviously, the more stable your company, the more you can sell it for.

What’s the lesson? Build a money-making machine! Do all you can to create a business that “prints money” (in a figurative sense!), and that has a stable leadership team to run it. Then you can argue that the risk in buying the operation is low. The buyer could reasonably be expected to settle for a lower rate of return, meaning you get a higher selling price. We’ll return to this theme after we’ve reviewed the income stream valuation approaches.

In this approach (sometimes also called capitalization of earnings), the value is based on the most recent fiscal year's earnings, after appropriate accounting adjustments have been made. These adjustments include inventory write-offs, bad debt write-offs, non-business income and loss, and compensation that the new owner deems to be too high or too low. To derive the selling price, we must then multiply the AEBIT ("adjusted earnings before interest and taxes") by the cap rate to get the selling price.

Current Earnings

Simple and elegant, but there is a drawback: the value of the firm's assets and intangibles are not treated under this approach. How do we derive compensation for things like "goodwill", reputation, and image? These items are worth something, but the Current Earnings method does not allow us any compensation for them.

This method is similar to current earnings, but it uses earnings over a recent time period adjusted for weight using trend analysis and present value factors.

Historical Earnings

Weighting for recent trends usually weights the most recent year the heaviest, the next oldest year the next heaviest, and so on. For instance, if we were to use the last five years of data, we might reason that the most recent year is the most typical, so we would assign it a weight of 5. The next most recent year would be closest to the most recent year, so we might give it a weight of 4. The next year back gets a weight of 3, and so on to the fifth year back, which has a weight of 1.

But we must also recast the prior year's earnings in present-day equivalents, since we normally must deal from year to year with variations in the value of currency. The net present value conversion factor for prior periods is given by the formula

$$NPV_{\text{past}} = \frac{1}{(1 - i)^n}$$

where i = the annual rate of inflation and n = the number of years ago the subject year occurred.

Historical Earnings (Con't)	<p>Each year's AEBIT are then multiplied by that year's weight and adjusted by the NPV factor. These results are then all added together and then divided by <i>the sum of the weighting factors</i> to get the average historic earnings in present dollar equivalents.</p> <p>Hence, a recent downturn can greatly reduce the value of the company. Likewise, a recent upswing can inflate its value. This is one of the problems with using the historical earnings approach.</p>
Future Earnings	<p>In this approach, a forecast of earnings is made over the next several years (usually 5 or more) and capitalized. Future earnings are discounted to net present value.</p> <p>In this case, the Net Present Value conversion factor is calculated with this formula:</p> $NPV_{\text{future}} = \frac{1}{(1 + i)^n}$ <p>This formula is very much like the one for past earnings, but it is subtly different—you must <i>add</i> the inflation to one, not subtract it.</p> <p>Most appraisers (and, for that matter, most buyers) stay away from future earnings because there are too many variables to accurately allow forecasting future earnings! Setting a price on the future earnings of a business is even more speculative than junk bonds. No one in their right mind would give very much money for a business valued with this approach.</p>
Capitalization of Excess Earnings	<p>From here on, the methods are hybrids of both income and asset valuation. Because of that, they are very popular with appraisers and buyers alike. The reason is that not only can the seller recover something for the intangible value of what he has built, but he can also recover money for the profitable business he has created too.</p>

The AICPA says, in its book *Conducting a Valuation of a Closely Held Business*, that “the excess earnings method... is probably the most widely used method of appraisal, particularly for small businesses and professional practices. This hybrid of the asset-based approach and the income approach... provides a method of valuing intangible assets.”

The assumption is made that the buyer should **not** pay for *normal* earnings on his investment. He should pay for earnings in excess of what he could get on his investment. This is abstract, but professional appraisers can handle it easily. (Don't attempt this at home!)

The first step in computing a capitalization of excess earnings valuation is to select a rate of return the buyer is willing to accept on his money if he invested it in purchasing the assets of your firm and then turned around and leased them to someone else. Deduct this result from the firm's earnings and capitalize the result. Add the future market value of the net assets to get the sale price.

Here is an example of the process: A firm has \$100,000 in assets; the buyer would accept a 10% rate of return on these assets. That means that he would accept 10% of \$100,000, or \$10,000, in annual profits from the use of the firm's assets. If the firm was making \$100,000 in profit a year, the buyer would be purchasing \$90,000 (the \$100,000 in profits less the \$10,000 annual profit he'd get anyway on the assets) of revenue. If the buyer felt that a cap rate of 25% was in order for the firm, he would pay 4 times \$90,000 for the revenue stream, plus \$100,000 for the assets, or a total of \$460,000.

Capitalization of Excess Earnings (Con't)

This is a less popular hybrid method because it is based on future forecasts of earnings and is thus suspect. (However, a counter argument runs that the chance of future rewards against the risk of future failure is precisely why people go into business in the first place!)

Despite the philosophical debate over its basic merits, this is how

Discounted Future Earnings

**Discounted
Future
Earnings
(Con't)**

the discounted future earnings method is computed:

$$PV = \frac{E(1 + g)^{-n}}{(R - g)}$$

where E = base earnings, g = annual growth rate of earnings, and R = discount rate. (R - g = cap rate.)

An example is definitely in order! Suppose our hypothetical company of the excess earnings case is assumed to grow 5% a year for the indefinite future, and that the buyer wants a 21% cap rate. By definition, the factor R is the sum of the cap rate and the growth rate, so R = 26%. The value of the business then would be given by

$$\text{Value} = \frac{(\$100,000 \times 1.05)}{0.21} = \frac{\$105,000}{0.21} = \$500,000$$

Note that this is \$40,000 higher than the excess earnings formula yielded.

**Establishing
a "Cap" Rate**

The key factor to all these revenue stream approaches is the capitalization rate. A small change in the cap rate can make a huge difference in the asking price for your business! How should a cap rate be established?

First, you must recognize that there is no one cap rate (or, for that matter, methodology to compute one) that is universally applicable and acceptable to all appraisers and all situations.

One of the most reliable (and complex) methods is the *individual rate for the business* method. This method is used when intangibles are a part of the value, particularly when using the excess earnings approach. Although no method gets a universal "thumbs up" from every appraiser for every situation, this one comes closest to getting widespread acceptance by appraisers. This method makes it impossible to use "rules of thumb" and it *does* require the engagement of a professional appraiser.

The technique an appraiser would use to derive an individual rate is far too complex to cover in this workbook. But we can tell you that it is a complex enough process that many CPA's don't do appraisals because of it! In the large majority of cases, this method will give you the most accurate asking price, but it will entail the expense (and that can be sizable) of an appraiser. However, when the cost of an appraiser is weighed against the money you might leave on the table by not using an appraiser and a simpler cap rate calculation method, only someone with no appreciation of the value of money would forego the use of an appraiser!

**Establishing
a "Cap" Rate
(Con't)**

A second cap rate calculation method is the *industry price to earnings ratio*. This is a useful method when the industry can be clearly identified as being in a representative group on the stock exchange. But how do we place your HVAC business on a scale with a company listed on the stock exchange? You cannot really compare your HVAC company to an HVAC manufacturer like Carrier, Trane, York or Lennox, can you? So this cap rate calculation, while valid for publicly traded companies, is of little use to small HVAC concerns.

P/E Ratios

A real zinger of a method is the *IRS formula method*. If you consider the source of this method and the motivation behind it, all we can advise you is that you should use this method when no better method is available! We won't go into it here, as most appraisers treat it with skepticism, and it does not produce reliable results for HVAC businesses.

**The IRS
Formula**

One method we will focus on is named *the Zipp method*, so-called in honor of its designer, Alan Zipp, a CPA who is also a business appraiser and valuation expert. He has defended this approach in tax court many times (successfully). Given that it is a relatively simple method, we like it. Being defensible in court makes it even better.

**The Zipp
Method**

The Zipp Method (Con't)

The Zipp method is to be used to derive a cap rate for excess earnings approaches only.

In brief, the Zipp method measures risks and rewards relative to a standard investment instrument of long-term stability, the United States treasury bond. T-bonds are long-term instruments that are relatively stable and have virtually no risk. It is generally accepted in the world of investing that the return on T-bonds is the floor on which all investment returns and risks are compared.

Zipp has identified five areas of risk. He then ranks these risks as low, moderate and high. He gives each risk level a factor for use in calculations: No risk = 0; Low risk = 1; Moderate risk = 2; High risk = 3; Extraordinary risk = judgment of appraiser.

The five areas of risk include:

- the market
- the industry
- the business itself
- financial stability
- and managerial stability, maturity and depth

Zipp also adds a liquidity factor.

Let's consider each of these risk areas and see how they would impact the calculation of a reasonable cap rate.

Market Risk

The rate of return the investor requires merely to invest in a closely-held business. In other words, how much return on his money would the average investor require to get him to move his funds out of T-bonds and into the venture in consideration? Zipp has successfully defended a risk factor of **twice** the T-bond rate as a starting point. (Some investors may say that they would not move investments out of T-bonds unless the return was 3 or 4 times the rate on T-bonds, but Zipp is considering the *average* investor.)

To provide a reasonable estimate of the relative risk of the industry in which the business operates in relation to the economy as a whole. For HVAC, there is no *published* risk factor. We would recommend a low to moderate risk factor (1 to 2).

**Industry
Risk**

To cover the risk of the business under appraisal. The more personal the nature of the business, the higher the premium for business risk (e.g.: dentists, chiropractors). The less personal the operation, the lower the risk (e.g.: utilities). Zipp's recommendation: approximate the percentage of future revenue which will be generated from *current* or existing clients. The more stable the client base, the safer the risk.

**Business
Risk**

Hence, a large service agreement base can be a huge bonus here! Conversely, having only a few large customers can be a terrible detriment.

Suppose, for instance, that a prospective buyer of your HVAC business approaches you and that you have a strong service agreement base load—so strong that it makes up 30% of your *total* revenues! The buyer knows that unless he or she really blows it and totally dissatisfies those service agreement customers, he or she should expect to see at least a set level of high margin revenue every year. The buyer feels safer with buying your company than if you told him or her that you only have 8 customers—all large new home builders. (Now the buyer is thinking, “Hmm. What happens if one or two of those builders leave town, or go broke? I could lose up to 40% of my business overnight! Or what if (God forbid) during the transition another HVAC shop muscles in and undercuts me by \$50 per house and steals two or three of my builders?”) Or you may have a situation where a huge chunk of your revenue comes from one commercial account. Why should the buyer put all his eggs in your one flimsy basket? He'd need a high cap rate to justify that kind of risk!

For HVAC, there is no *published* risk factor, but we recommend a risk from nil or low (with heavy service agreements and proven customer loyalty—factor of 1 or less) to high (3 or more) with no proven repeat business patterns or only a few major customers.

**Financial
Risk**

Relative to the debt structure of the business. Zipp suggests you index your leverage by comparing the cost of debt to the earnings. He also recommends you consider the abundance (or lack) of cash and the cash flow in making a determination.

For HVAC, there is no *published* risk factor. We suggest ratings from nil or low (little debt, good cash flow) to high (heavy debt, poor cash flow). Such a rating can only be established after a careful examination of the recast balance sheet and statements of cash flow.

**Management
Risk**

Relative to the business's dependence on the *personal skills of one person* versus managerial talent in a pool of competent people. The smaller the firm, the more critical the management risk factor is. Also, the more personal the service, the higher the risk factor.

This is where developing a management **team** prior to your retirement becomes (literally) worth its weight in gold. If a buyer is thinking about buying your HVAC business, but sees that *you* are the business—that nothing gets done without your direct involvement, that everyone depends on you for decisions—then he might think, “Why should I buy those headaches?” Rather, show the buyer a **team** of people who are talented and work well together, who make decisions that are sound and make them without having to get your blessing all the time. Now *there's* a business with a future! He'll gladly pay *more* for that setup than for one with a one-man show. Even if you agreed to stay around for a year or two while he gets things under his belt, there is no guarantee that the business will stay alive after you leave. It's just too risky!

For HVAC, there is no *published* risk factor. We suggest ratings form nil or low (strong management team) to high (the company is a personality cult).

A measure of how easy it will be for the owner to convert the business into a sale for cash. For a business with a reasonable resale market, Zipp suggests a 10% premium. For less liquid firms, the premium goes up. The determination of this factor can only be made accurately by a skilled appraiser. The concept here is that if the new buyer gets into trouble, he may need to sell everything off in order to minimize his losses. If the stuff he has to sell could sell quickly, he could (theoretically) get out of trouble quickly. If it takes longer to unload the business, he could go down with the ship before help arrives. If 10% is a minimum premium for a fluid operation, the liquidity factor could be as high as 100% for rigid-as-stone concerns.

Liquidity Factor

Zipp says that once the risks are determined, you should add the risk factors for the five risks and multiply by the current T-bond rate; add the Liquidity Factor premium. This represents a reasonable capitalization rate.

An Example

Let's take an example.

Suppose the current T-bond rate (which can be found in any stock exchange listing) is 8.16%.

The following risk factors are determined for Art's Pretty Good Air Conditioning Company:

Risk Factor	Risk	Multiple
Market Risk	Normal	1.5
Industry Risk	Low	1
Business Risk	Low	1
Financial Risk	Low	0.5
Management Risk	Low	1
Liquidity Factor	Mod High	20%

Adding the risk multiples, we get 5. Multiplying this by 8.16% gives 41%; adding the 20% liquidity factor gives a cap rate of 61%. The pricing multiplier would be $1 \div (1 - 0.61)$ or 2.56.

<p>An Example (Con't)</p>	<p>This indicates that the potential risk to the buyer is fairly high—a premise borne out by the fact that each year, about 1/3 of the businesses in our industry close their doors!</p>
<p>Rules of Thumb</p>	<p>Rule of thumb valuation methods are, at best, very shaky and, at worst, disastrous! In no case should you ever attempt to sell your business without engaging a competent appraiser.</p> <p>However, you can use the rules of thumb as checkpoints to which you can compare the price you and your appraiser set.</p> <p>There are two general measures of selling price that are related to earnings. One is called the Price to Net Earnings Ratio and can be found by taking the selling price divided by the net earnings (before tax). For service industries (and in the database that gave this ratio, this is a very broad category), the mean price to net earnings ratio is 2.30. However, the range is wide so you can't place a great deal of confidence in using this ratio to derive a selling price. As a check, it is usable; but it is not adequate as the <i>only</i> way to set a price.</p> <p>Another ratio is the price to gross revenues ratio. Again, it is a rather blurry measurement. For service industries, the average is 0.71.</p> <p>In a study by <i>Inc.</i> magazine, it was found that the actual selling price as a percentage of the asking price was 88.7% for all businesses studied. The study found that the bigger the business, the closer the selling price was to the asking price. (This suggests that owners of smaller firms often don't do a very good job of pricing their offerings—perhaps because they did not invest in an appraisal process.)</p> <p>The <i>Inc.</i> survey also found that the average price to gross revenues ratio was 0.57 and the average price to net earnings ratio was 2.70.</p> <p>All of which suggests to us that (1) it pays to engage an appraiser, and (2) you probably won't get what you want for your business when it is time to sell it.</p>

Finally, business valuation expert and managing director of C. D. Peterson Associates (a brokerage firm in Danbury, CT) Duncan Haile says you may need to spoon-feed the buyer. “You want to help the sale go forward,” says Duncan, “so you need to give the buyer what he or she will need to do the due diligence: equipment lists, customer lists, supplier information, and the like.” In other words, make it easy for the buyer to understand exactly what he’s buying, where it’s been, and where it’s headed.

**Final
Advice**

To quote *Inc.* again, (November 1994 issue, page 77):

And if you can combine the right price with financials that have been audited by a reputable firm— with none of those discretionary expenses (you know, the country club, the tennis lessons) hanging on— you’ll be fighting off the bids from qualified, cash-rich buyers.

For more information on Lodestar Consulting Systems or to attend a Lodestar seminar, check our my page (www.lodestarconsultinginc.com) or check with your distributor, or write me at lodestar51@cox.net.