Why Rules of Thumb Are Dangerous

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Rules of thumb have been developed over the years in order to provide people with a quick and easy way to get a general idea as to the value of a business. These rules of thumb were designed to give a "ball park" estimate only, but it should be mentioned that as such, there are many problems associated with using them as the sole means of valuing a business enterprise (as many factors influence the actual value of what a "willing buyer" would pay and a "willing seller" would accept). Also, there are typically multiple rules of thumb for most business types, each of which yields a different conclusion… sometimes a radically different conclusion.

This topic came to mind as I have been working periodically over the last several years with a father-and-son-operated medical practice. Dad owns the practice and both the son and dad have worked together in the practice for a number of years. Dad wants to sell the practice to the son and the son wants to buy it; however, dad's accountant believes that the value should be based entirely on a rule of thumb. I quote: "the business brokers / valuation experts that I have dealt with during acquisition engagements use a guideline of 45% to 55% of annual gross revenue for calculating the purchase price / goodwill of a practice." Of course, the dad's CPA is using the high end of this scale (55%) to determine the sales price. In order to see the obvious problem of using this rule of thumb, I have provided the following income and expense summary and an income valuation approach to the practice.

Medical Practice -- Value Per Rule of Thumb				
				Forecast
	2008	**2009**	**2010**	**2011**
Sales	900,000	950,000	1,000,000	1,075,000
Indicated Value -- Using 45% of Gross Revenue (Rounded)				**500,000**
Indicated Value -- Using 55% of Gross Revenue (Rounded)				**600,000**

The following are the reported income and expenses for the medical practice.

Medical Practice Reported Income and Expenses				
				Forecast
	2008	**2009**	**2010**	**2011**
Sales	900,000	950,000	1,000,000	1,075,000
Operating Expenses	663,000	709,000	755,000	824,000
Net Income Before Income Taxes	237,000	241,000	245,000	251,000
Provision for Income Taxes (Personal Rates - 'S' Corp)	97,170	98,810	100,450	102,910
Net Income After Taxes	139,830	142,190	144,550	148,090
Less: Adjustments for Net Cash Flow	(10,500)	(15,875)	(22,450)	(25,500)
Net Cash Flow	129,330	126,315	122,100	122,590

Here is the indicated value of the practice using the income approach and the reported income and expenses of the practice (no adjustments):

Capitalization of Earnings Method			
Forecasted Adjusted Net Cash Flow	122,590		
Times: Long-Term Sustainable Growth Rate	1.03		
Amount to be Capitalized	126,268		
Amount Capitalized	126,268	=	789,173
Capitalization Rate	16.0%		
Indicated Value - Rounded			**800,000**

As is clearly evident, if the reported income and expenses were representative of the market rates for doctor compensation and rental rates for the real estate, the value would be considerably higher than that derived under the rules of thumb.

Unfortunately, the reported income and expenses included only a small annual salary of $60,000 for the owner-doctor and no rent expense was paid by the business for the building owned by the doctor. In a sale of the practice, the owner-doctor's salary would be adjusted to $175,000 and the rent to market rent of $50,000 as if leased from an independent third party. After these adjustments, the practice income and expenses are shown below:

Medical Practice **Adjusted Income and Expenses** (Adjusted for market salaries and market rents)				
				Forecast
	2008	**2009**	**2010**	**2011**
Sales	900,000	950,000	1,000,000	1,075,000
Operating Expenses	828,000	874,000	920,000	989,000
Net Income Before Income Taxes	72,000	76,000	80,000	86,000
Provision for Income Taxes (Personal Rates - 'S' Corp)	23,760	25,080	26,400	28,380
Net Income After Taxes	48,240	50,920	53,600	57,620
Less: Adjustments for Net Cash Flow	(10,500)	(15,875)	(22,450)	(25,500)
Net Cash Flow	37,740	35,045	31,150	32,120

Here is the revised indicated value of the practice using the income approach using the actual market income and expenses of the practice (after adjustments):

Capitalization of Earnings Method			
Forecasted Adjusted Net Cash Flow	32,120		
Times: Long-Term Sustainable Growth Rate	1.03		
Amount to be Capitalized	33,084		
Amount Capitalized	33,084	=	206,773
Capitalization Rate	16.0%		
Indicated Value - Rounded			**200,000**

This value of $200,000 represents the "actual" value of the practice, based on its specific income and expenses.

The following purchase justification tests show what would happen to a purchaser if the practice were bought at indicated value using the 55% of gross revenue rule of thumb and the adjusted income and expenses of the practice:

Purchase Justification Test Summary		
	Purchase Price - Income & Expenses	Purchase Price - 55% of Gross Income Rule of Thumb
Purchase Price	$200,000	$600,000
First Year		
Net Income Before Taxes	86,000	86,000
Less: Interest Expense on Loan	(15,197)	(45,592)
Taxable Income	70,803	40,408
Less: Income Taxes (30%)	(21,241)	(12,122)
Income After Taxes	49,562	28,286
Less: Principal Payment on Loan	(22,210)	(66,629)
Remaining Cash Flow for Buyer	27,352	(38,343)
Second Year		
Net Income Before Taxes	89,440	89,440
Less: Interest Expense on Loan	(13,354)	(40,062)
Taxable Income	76,086	49,378
Less: Income Taxes (30%)	(22,826)	(14,813)
Income After Taxes	53,260	34,565
Less: Principal Payment on Loan	(24,053)	(72,159)
Remaining Cash Flow for Buyer	29,207	(37,594)
And so on ….		

As shown by the purchase justification test summary, a purchase of the practice for $200,000 results in the buyer being able to receive a small annual positive cash flow, sufficient to warrant the risk of purchasing a practice. If the practice were purchased for the $600,000 indicated by the 55% of gross annual revenue, the buyer would need to inject an annual payment of $40,000 in order to stay afloat; clearly not representative of what a fair market value buyer would do!

A rule of thumb, particularly one tied to gross revenue, ignores the specifics of a practice or business. In the case of medical practices, prices being paid over the last few years have dropped significantly as a percentage of gross revenue. The expenses of operating a medical practice have increased and reimbursement rates (i.e., gross revenue) from Medicare and insurance companies have been squeezed downward dramatically. As a result of the medical industry reforms currently underway, gross margins are expected to be squeezed even further, resulting in less profit from medical practices. All of these factors, and many more, are being taken into consideration by potential buyers of practices. Some of the gross revenue rules of thumb may have been more accurate in the 1990s, but they certainly are not very useful today without careful consideration.

There simply is no substitute for a well prepared business appraisal by a qualified and experienced business appraiser.

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