



Business Valuation Calculation Guide

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INTRODUCTION

HOW MUCH IS YOUR BUSINESS WORTH?

What a business is worth is not just a reply to the flippant comment “whatever someone is prepared to pay for it”. This usually means they don’t know how to calculate the value of a business and really should not be giving opinions on value.

The value of a business is the price at which a buyer and seller are willing to exchange a set of assets with full knowledge of all information, no pressure to sell or to buy and conducting the transaction at arm’s length.

In essence this means that the valuation should:

- Follow a clear process.
- Another person able to repeat the assessment with the same information and arrive at the same result.
- Based on evidence.

In most cases if you follow the process we use and have documented in this Calculation Guide then you will arrive at a defensible price for the business.

Whether all parties agree on that price is the subject of many books on the matter and we won’t go into it here (hint: look at financial behavioral science – it is a thing!)

To give you a better and more informed idea of the value of your business we have documented the basic process we follow and explained some of the valuation terms and methods:

- What the value of a business really means.
- Business valuation process
- Key methods for calculating the value of a business.
- How to interpret the outcome of the valuation.

We have made the following assumptions:

- The business is a going concern (or at least NOT insolvent or in financial distress).
- We are assessing market value of the enterprise (not equity value).
- The date of business valuation is at the end of the most recent set of completed financial reports.
- The business has been operating for at least two years without any major disruptions to business or exceptional one-off events that may impact the valuation.

INFORMATION REQUIREMENTS

At a minimum you will need the following information:

- EBITDA for last completed financial year (Earnings before interest tax depreciation and amortization).
 - This is essentially Net Profit Before Tax Plus:
 - Interest for the reported year
 - Depreciation for the reported year
 - Amortisation for the reported year
- Expected EBITDA for next two years
- Owners salary for last completed year
- One off operating costs in last completed year (if any)
- Expected increases in costs in following years (if any)
- Increase in non-cash working capital in last completed year and next two years (if any)
- Balance sheet for last completed year (showing assets and liabilities)

BUSINESS VALUATION PROCESS AND METHODS

The process we will follow is laid out on the "Calculate The Value of A Business" page of our website (<https://www.exitvalue.com.au/calculate-value-of-business>)

First of all we are assessing the value of the enterprise – the minimum assets and liabilities required to operate the business without any reference to any structure (sole trader, partnership, trust or private company).

The enterprise includes:

- All **non-cash** current assets, excluding loans to owners or surplus assets.
- All tangible and intangible assets required to operate the business.
- All current liabilities associated with the business, excluding any long term debt due in the current period and excluding income tax associated with the entity.

In essence the enterprise is the working assets and liabilities necessary to operate the business, excluding cash, long term debt and certain tax liabilities.

It is important to work out two key figures:

- Adjusted Ongoing EBITDA
- Reported Net Assets of Enterprise (from most recent balance sheet).

If the capitalisation of the ongoing earnings (using the FME method we will detail later) is less than the reported net assets of the enterprise then the most appropriate method for assessing the market value of the enterprise is to use the Assets method.

ADJUSTED ONGOING EBITDA

The Adjusted Ongoing EBITDA is:

Reported EBITDA (excluding extraordinary items)

+ Amounts in excess of market salary of owner (if owner salaries are not recorded as a cost item then the total market salary should be included as a negative item)

+ One-Off Operating expenses (such as one off legal fees, relocation costs, one-off repairs, R&D expenses that are not ongoing)

+ Growth in EBITDA in next 1 – 2 years (as a single averaged value)

- Increases in operating expenses in future years

- Increases in non-cash working capital in future years

The aim is to arrive at some value of earnings that is expected in the current year and the next year.

We are making the assumption that this is the earnings expected on an ongoing basis (our assumption of the business reaching a steady state level of profits).

The following example shows the workings for this variable:

- A manufacturing company making food products sold to national retailers without ongoing volume agreements.
- Single owner paid \$165k inc super and benefits, considered \$15k over market salary
- One off relocation expenses of \$45k in FY18
- Expect increases in non-cash working capital of \$20k in FY19 and \$30k in FY20

The table below shows the worked example:

Variable	Last Reported Result	Expected Result Current Year	Expected Result Following Year
Financial Year	FY18	FY19	FY20
Revenue (\$'000)	1,500	1,800	2,100
EBITDA (exclude any extraordinary income) (\$'000)	150	210	250
Add back: Excess Owners Salaries (if any) (\$'000)	15	15	15
Add back: One off operating expenses (if any) (\$'000)	45	-	-
Subtract: Expected cost increases (if any) (\$'000)	-	-	-
Subtract: Increases in non-cash working capital (if any) (\$'000)		20	30
Adjusted EBITDA (\$'000)	210	245	295
Midpoint of Adjusted EBITDA - single figure (\$'000)		253	

Now fill in the table below using your information:

Variable	Last Reported Result	Expected Result Current Year	Expected Result Following Year
Financial Year			
Revenue (\$'000)			
EBITDA (exclude any extraordinary income) (\$'000)			
Add back: Excess Owners Salaries (if any) (\$'000)			
Add back: One off operating expenses (if any) (\$'000)			
Subtract: Expected cost increases (if any) (\$'000)			
Subtract: Increases in working capital (if any) (\$'000)			
Adjusted EBITDA (\$'000)			
Midpoint of Adjusted EBITDA - single figure (\$'000)			

REPORTED NET ASSETS OF ENTERPRISE

In essence the reported net assets of enterprise are:

Total Assets

- Cash
- Loans to Owners
- Current Liabilities
- + Income tax liabilities of entity
- + Loans from owners (if reported under current liabilities)

Variable	Last Reported Result	Expected Result Current Year
Financial Year		
Total Reported Assets (\$'000)		
Less Cash assets (\$'000)		
Less Loans TO Owners (\$'000)		
Less Current Liabilities (\$'000)		
Plus Income Tax Liabilities (\$'000)		
Plus Loans FROM Owners (\$'000)		
Net Assets of Enterprise		

MARKET METHOD

There are two key methods we want to show in this section:

- “Last Money In” method
- Comparable Transaction method

The “Last Money In” method is typically applied to:

- Early stage start-ups
- Technology or software-based businesses that may be generating revenue but are making losses at an EBITDA level.

The Comparable Transactions method can be applied where a similar business (and preferably two or three) has been sold recently and the key details of the transaction are available.

LAST MONEY IN

- $100\% \text{ Value} = \text{Last Previous Investment (\$)} / \% \text{ Ownership obtained}$

Variable	Your Business
Last Previous Investment (\$)	
% Ownership Obtained	
Implied Value of 100%	

COMPARABLE TRANSACTION METHOD

If you are able to find the details of a comparable business transaction where the business transacted has similar characteristics to your business then use this method as the primary method. Otherwise proceed to the next step.

Variable	Transaction #1	Transaction #2	Transaction #3
Transaction Price \$ (Inc any stock)			
Last reported EBITDA (\$)			
Implied EV:EBITDA Multiple			
Any Adjustments to Multiple?			
<ul style="list-style-type: none"> • % Reduction for size (0% - 25%) • % Reduction for lack of marketability (0% - 15%) • % Reduction for special factors (0% - 10%) 			
Adjusted EV:EBITDA Multiple			

Using the Adjusted EV:EBITDA Multiple, fill in the table below applied to your business:

Variable	Your Business Case #1	Your Business Case #2	Your Business Case #3
Implied EV:EBITDA Multiple Used			
Your last reported EBITDA (\$)			
Enterprise Value (\$)			
Enterprise Value Midpoint (\$)			

The Enterprise value calculated from this method should now be compared to the Reported Net Assets of the Enterprise:

- If the Comparable Transaction method is greater than the reported Net Assets of Enterprise method then this suggests the business has some level of intangible value, This could be of the form of goodwill, intellectual property or some other intangible asset.
- If the Comparable Transaction method is less than reported Net Assets of Enterprise then the balance sheet should be reviewed to determine if the reported values of assets and liabilities is representative of market value. In some cases it may be necessary to default to the Reported Net Asset value.

INCOME METHOD

The usual method of calculating the value of a business is the Future Maintainable Earnings (FME) method.

The core assumptions of this method are:

- The risk profile of the business over the medium term is unlikely to significantly change.
- The profits and growth of the business have reached a point of steady state and an estimate can be made of ongoing earnings (EBITDA) can be reliably made.

FME METHOD FORMULA

This conventionally accepted method capitalises the future maintainable earnings ('FME') of an asset / business by an appropriate capitalisation or investment rate (the EBITDA multiple).

The rate is based on market expectations after giving consideration to all conditions relevant at that time, including the economy in general and the business and industry of that entity in particular.

Surplus, unproductive or unrelated assets are valued separately and added to the value derived by capitalising the future maintainable earnings.

The Earnings Multiple methods are of a generic formula, where:

$$\text{Enterprise Value} = \text{EBITDA Multiple} * \text{Adjusted EBITDA}$$

ADJUSTED EBITDA

We have already calculated an Adjusted EBITDA above, however we have included an additional empty table for additional workings:

Variable	Last Reported Result	Expected Result Current Year	Expected Result Following Year
Financial Year			
Revenue (\$'000)			
EBITDA (exclude any extraordinary income) (\$'000)			
Add back: Excess Owners Salaries (if any) (\$'000)			
Add back: One off operating expenses (if any) (\$'000)			
Subtract: Expected cost increases (if any) (\$'000)			
Subtract: Increases in working capital (if any) (\$'000)			
Adjusted EBITDA (\$'000)			
Midpoint of Adjusted EBITDA - single figure (\$'000)			

THE EBITDA MULTIPLE

The selection of the multiple requires some experience and judgement, and we typically select an EBITDA Multiple in two stages:

- We determine a broad range from a lowest expected multiple to a highest expected multiple given the circumstances and the industry concerned. This may be a range from 1.5x – 3.5x or 2.0x – 4.5x, based on our experience and some assessment of recent transactions. In some cases we use adjusted EBITDA multiples from certain ASX stocks as a guide.
- We then assess the business against a range of more than 20 criteria to narrow this range to something more acceptable, such as 1.8x – 2.3x or 2.7x – 3.1x.

In this case however we will provide some general guidelines in order to arrive at a reasonable estimate.

- Almost 80% of all businesses with revenue less than \$2m will transact at 2.0x EBTDA or less.
- Observed multiples for businesses with revenue less than \$500k are 0.5x – 2.0x. In some rare cases the high multiple may exceed 2.0x but often unlikely.
- Observed multiples for businesses with revenue \$1m - \$5m: 1.5x – 3.5x
- Observed multiples for businesses with revenue \$5m - \$10m: 2.0x – 4.5x
- Observed multiples for businesses with revenue \$10m - \$20m: 3.0x – 5.5x

In most cases it is extremely rare for a business to attract a multiple greater than 6.0x unless:

- Business has considerable size and scale
- Some level of long term customer arrangements
- Revenue typically \$40m+
- EBITDA Margins of 20%+
- A management team with structure, automated management systems and effective culture, governance structures and use of technology.

Fill in the table below with your assessment of your business:

Variable	Low Result	High Result	Midpoint
Observed Multiple Based on above revenue ranges			
Narrow range by 10% (increase low result and reduce high result) for greater than industry average EBITDA margin			
Narrow range by 10% (increase low result and reduce high result) for documented systems and processes			
Narrow range by 10% (increase low result and reduce high result) for integrated use of technology			
Narrow range by 10% (increase low result and reduce high result) for greater market share than competitors			
Expected EBITDA Multiple Range			

AN FME METHOD EXAMPLE

- Manufacturing company making food products sold to national retailers without ongoing volume agreements.
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Variable	Last Reported Result	Expected Result Current Year	Expected Result Following Year
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Add back: One off operating expenses (if any) (\$'000)	45	-	-
Subtract: Expected cost increases (if any) (\$'000)	-	-	-
Subtract: Increases in non-cash working capital (if any) (\$'000)		20	30
Adjusted EBITDA (\$'000)	210	245	295
Midpoint of Adjusted EBITDA - single figure (\$'000)		253	

Variable	Low Result	High Result	Midpoint
Adjusted EBITDA (\$'000)	253	253	253
EV:EBITDA Multiple Used	2.1	2.9	2.5
Enterprise Value (\$'000)	531	734	633

We would argue that the valuation process is only precise to the nearest \$5,000 so we would report this as an enterprise value of \$530k - \$735k and a midpoint of \$635k.

NOW IT IS YOUR TURN

Fill in the table using your Adjusted EBITDA and EV:EBITDA Multiple:

Variable	Low Result	High Result	Midpoint
Adjusted EBITDA (\$'000)			
EV:EBITDA Multiple Used			
Enterprise Value (\$'000)			

The Enterprise Value represents the enterprise value and does not include cash or surplus assets. It does include stock, accounts receivable and all tangible and intangible assets. It also includes the current liabilities necessary for ongoing operation of the business but does not include long term debt.

To convert this to an equity value requires adjustment for Net Debt and consideration of any other ownership or structural issues. To discuss this, contact your expert valuer.

If the Enterprise Value calculated from this method is LESS than the reported enterprise value on your balance sheet:

- This means there is insufficient earnings to use this method and an alternative method should be used (such as Assets method).
- Typically this is the result of a low EBITDA margin and/or return on invested capital. In some cases this may imply that the business is not commercially viable at present and actions should be taken to increase profitability.

ASSET METHOD

This method considers an adjusted value of the assets and liabilities held by the associated entities to be representative of market value. The asset based valuation method we will adopt is:

- Going concern basis:
 - This assumes that the assets and liabilities of the business are transferred on a going concern basis. Therefore, no allowance is made for the costs of realizing the assets or extinguishing the liabilities.

It is also likely that there are some unreported assets and liabilities which should be assessed and added to this method. We will highlight some of the common items.

The use of asset based methods is appropriate where the:

- Enterprise is merely in a 'holding' situation and is not trading.
- Enterprise or business entity generates little or no income, so as not to be an attractive investment proposition from the willing buyer's point of view.
- When compared to the investment in operating infrastructure, the business does not generate sufficient earnings to justify goodwill.
- Nature of the operations is such that it is not possible to make an estimate of maintainable earnings.

It follows the same layout as the Reported Net Assets shown earlier, but includes additional items:

- Adjustments to stock (raw materials and finished goods) to reflect market value of the assets in a stand-alone circumstance but sold as if to be "fit for purpose".
- Adjustments to carrying value of equipment, motor vehicles, land and buildings or other tangible assets.
- Market value of any licences or intellectual property held.
- In some cases there may be a reasonable market value for registered trade or brand names, websites or software platforms purchased and installed or developed as stand-alone software.
- Any unreported employee entitlements such as long service leave, sick leave, annual leave. Where redundancies may be made, provision should be made for redundancy entitlements according to any awards or Fair Work Australia regulations.
- Contingent liabilities associated with any legal action, voided warranties or quality issues, OH&S issues or environmental clean up costs that will be inherited.
- Any immediate investments that must be made to continue the effective operation of the business AT expected or current levels (typically shown as negative assets or shown as a liability).

An amended table is shown below with the above items. In many cases the amendments will be based on estimates.

Variable	Last Reported Result	Expected Result Current Year
Financial Year		
Total Reported Assets (\$'000)		
Less Cash assets (\$'000)		
Less Loans TO Owners (\$'000)		
Less Current Liabilities (\$'000)		
Plus Income Tax Liabilities (\$'000)		
Plus Loans FROM Owners (\$'000)		
Reported Net Assets of Enterprise		
Adjustments		
Less reduction in inventory value		
Less reduction in tangible assets value		
Plus market value of intangible assets such as IP or licences		
Plus market value of relevant installed software previously expensed		
Less unreported employee entitlements		
Less unreported contingent liabilities		
Less any immediate investments required		
Final Adjusted Net Assets of Enterprise		

COST METHOD

Where a business has none or minimal reported assets it may be appropriate to consider using the Cost method. In this case we are considering the cost of replacement of the particular assets, which are typically intangible assets such:

- Client list
- Registered Trading and Business Names
- Website and domain
- Developed and installed software
- Detailed designs
- Licenses or regulatory approvals that can be transferred
- Contracts or rights to receive payments as a result of contracts
- Creative content such as art, songs, sculptures or other creative items.

Cost based methods are used to determine the cost the business would incur if it was deprived of the current assets and had to replace them in some way.

These methods consider the costs associated with creating (accumulated costs expended to date) or replacing the business (i.e. the cost to be incurred to replace the asset). They do not reflect future economic benefit.

This area is often very subjective and difficult to document, however we have completed a table that provides some guidance:

Variable	Lowest Estimate (\$)	Highest Estimate (\$)	Midpoint Estimate (\$)
Client List (depends on size and ongoing revenue – can range from Nil - \$50k)			
Domains and website (domains can be Nil - \$5k depending on demand) Website depends on complexity (\$5k - \$50k)			
Registered Trading / Business Names (Nil - \$10k)			
Purchased and Installed software (cost of purchase plus staff time spent on installation and training at market rates)			
Detailed designs at cost (design cost, engineering costs)			
Replacement value of licenses and other regulatory approvals			
Net Present Value of contract rights			
Market value of creative content			
Final Adjusted Net Assets of Enterprise			
Plus Reported Net Assets of Enterprise			
Total Net Assets of Enterprise			

RULES OF THUMB METHOD

Rules of thumb are typically a variant of the market based method, and make certain assumptions about other businesses to infer a value.

Examples include:

- Value of a rent roll is 1.5x – 3.5x recurring rental income
- Value of an accounting practice is 0.8x – 1.2x recurring revenue

In each case we are assuming:

- The profitability of these businesses remains the same such that value is based on some factor of revenue.
- Past transactions support the rules of thumb.

However they can be very subjective and rely on the relevant industry, the nature of each business and whether business conditions have remained sufficiently the same such that the rules continue to apply.

A case in point is the rules used to value taxi licenses before the entry of Uber and ride sharing technology. Those past rules (typically a last money in style method) are no longer applicable.

For this reason we have not provided a guide to these methods, but if there is no other method available then this method is all that is left. In that situation we recommend you contact your expert valuer to offer the rules used for your industry.

COMPARISON OF ALL METHODS

In most cases it is inappropriate to compare ALL methods, as this implies we pick the best valuation we want.

The purpose of comparing is to see cross check the MOST appropriate method (eg may be income method) with other methods to see if it passes the “sniff test”.

Variable	Primary or Cross Check Method?	Lowest Estimate (\$)	Highest Estimate (\$)	Midpoint Estimate (\$)
Last Money In				
Comparable Transaction Method				
FME Method				
Asset Method				
Cost Method				

If you have any questions about this guide and the valuation of your business then contact your nearest expert business valuer.

ABOUT US

At Exit Value Advisers we believe the concept of value is at the heart of all successful businesses and should be considered in any business decision.

Our focus is to illuminate the value decisions that privately held business owners make through in-depth business valuations and innovative exit strategies.

We use detailed valuation research and the latest transaction trends to facilitate strategic exits by business owners at an attractive premium price.

Our detailed analysis and research on the value of a business is used to inform and guide business owners when:

- Buying or selling a business.
- Growing a business through organic improvement.
- Making capital investment decisions.
- Developing and implementing succession plans.
- Finding the best exit strategy for owners.
- Negotiating the exit of an owner.
- Defending or resolving a commercial dispute.
- Restructuring for tax purposes.

Our approach to quality is based on two principles:

- Extensive and illuminating evidence-based analysis that explores the roles of the business model, the business and economic environment, systems and processes and people in generating financial results.
- Using systems and processes to cross check our results against the evidence.

Our values are based around the key principles fundamental to those at Exit Value Advisers:

- Understanding the “why” of business outcomes.
- Educating people on the connection between business value and strategy.
- Research on the latest trends and theory and how this can be applied to business.
- Quality outcomes for the client and our associates.
- Embellishing fun into our serious passion.

OUR CEO

Mike Williams B App Sc, MBA



Mike is a small business valuation expert with ten years' experience in valuing privately held businesses and more than 15 years management consulting experience.

He is CEO of Exit Value Advisers Pty Ltd, Founding Principal of Maxell Consulting and a past and present director of a diverse range of small businesses. He has the knowledge, skills and experience to help any business owner when it comes to valuation, business growth, exit strategies and succession plans.

He has valued hundreds of businesses in almost every industry, for a variety of reasons including supporting selling, buying or merging businesses, tax restructuring, commercial disputes, family law matters, seeking investment and making management decisions.

His background has given him a diversity that can be applied to almost any business. He has formal training in science, mathematics, computing and business, more than 10 years management experience in the manufacturing and process industries, and more than 15 years consulting experience.

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