

THE VALUE OF *Total assets*

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The assessment of the market value of total assets is an important issue for stamp duty and tax purposes. In this paper, we re-evaluate the relationship between the value of the total assets of a business entity and its enterprise value (EV). In practice there are several methods commonly used to assess the value of total assets, based on various adjustments to the EV. However, our findings indicate that all of these adjustments are inappropriate, with the exception of the addition of the value of surplus assets to the DCF-based enterprise value. The total assets to which the market value standard is applied for tax and stamp duty purposes should include the net working capital assets. The correctly derived enterprise value reflects the market value of total assets.¹

The value of total assets often becomes a contentious issue in what are known as 'land rich' cases where assessing the value of the total assets of an entity is relevant for tax purposes.² Typical 'land rich' issues arise in commercial transactions where the consideration for a 100 per cent equity interest in the entity is either observable or ascertainable.

The source of contention is whether the total value of assets is the same as the EV of the entity. The latter is the present value of the expected cash flows from that entity, which can be practically measured as the sum of the market value of equity (on 100 per cent controlling interest basis) plus the market value of interest-bearing debt.

By definition, the value of the total assets of a business entity is the present value of the expected future cash flows from these assets and one might intuitively expect that it would be uncontroversial that valuers, investors etc. should use enterprise value to assess the value of total assets (the EV method). However, in practice, this is not the case. In many instances, the commonly adopted method is to add the book value of the total liabilities of the entity to the observable or ascertainable implied value of the 100 per cent equity interest in the entity. There are several variants of this alternative method of assessing the value of total assets, where the value of total assets is variously calculated as EV *plus*:

- > book value of all non-interest-bearing liabilities and provisions; or
- > book value of working capital liabilities; or
- > book value of working capital assets; or
- > book value of net working capital assets; or
- > less commonly, other permutations and commutations of the above

These various methods are hereinafter referred to as the EV plus add-on method.

In order to illustrate the source of confusion and errors, Figure 1 provides a comparison³ between a simplified accounting balance sheet and a simplified economic/valuation balance sheet.

FIGURE 1: A simplified accounting balance sheet and a simplified economic/valuation balance sheet

Accounting perspective			
Assets	\$m	Liabilities	\$m
Cash	1	Payables	1
Receivables	3	Interest-bearing debt	7
Producing assets	14	Equity	10
	18		18

Economic/valuation perspective			
Assets	\$m	Liabilities	\$m
Cash	1	Interest-bearing debt	7
Receivables	3	Equity	10
Less payables	(1)		
Net working capital assets	3		
Producing assets	14		
	17		17

The comparison in Figure 1 indicates that the economic/valuation perspective (underpinning the EV method) focuses on the forward-looking cash flow generating/maintaining capability of the going concern business and provides delineation between value creation and value distribution. This is because shifting trade payables to the asset side of the balance sheet makes this side of the balance sheet truly represent the ability of the existing economic resources underpinning the going concern business to create forward-looking cash flows/value at a given point in time, while leaving the right-hand-side or liability side of the balance sheet to represent the distribution of value between the providers of debt and equity capital to the business. This important delineation is blurred in the pure accounting balance sheet (underpinning the EV plus add-on method) due to its inherent focus on the separation of accounting assets from accounting liabilities.

In addition, given that the economic/valuation perspective focuses on the forward-looking ability of a business entity to generate cash flows and create value, it also better reflects what the business could be sold for at a given valuation date.

Figure 2 sets out a sample of 'land rich' cases where we have observed the incidence of the EV plus add-on method adopted by opposing experts⁴ through our involvement as one of the valuation experts.

FIGURE 2: A sample of 'land rich' cases

Case	Type of 'land rich' cases	Subject of valuation	Nature of add-ons
A	Stamp duty	Mining assets	Non-interest-bearing liabilities ⁽¹⁾
B	Stamp duty	Mining assets	Non-interest-bearing liabilities ⁽¹⁾
C	Stamp duty	Aged care facilities	Non-interest-bearing liabilities ⁽²⁾
D	Stamp duty	Aged care facilities	Non-interest-bearing liabilities ⁽²⁾
E	Stamp duty	Aged care facilities	Non-interest-bearing liabilities ⁽²⁾
F	Stamp duty	Aged care facilities and retirement villages	Non-interest-bearing liabilities ⁽²⁾
G	Stamp duty	Airport facilities	Non-interest-bearing liabilities ⁽³⁾
H	Stamp duty	Mining assets	Non-interest-bearing liabilities ⁽³⁾
I	Stamp duty	Mining assets	Gross working capital assets
J	Income tax	Mining assets	Net working capital assets
K	Income tax	Mining assets	Net working capital assets
L	Income tax	Mining assets	Net working capital assets
M	Income tax	Mining assets	Net working capital assets
N	Income tax	Mining assets	Net working capital assets

Notes:

(1) Including (significant) deferred tax liabilities and provision for rehabilitation costs

(2) Including (significant) deferred tax liabilities

(3) Excluding deferred tax liabilities

The contentious issue arising from the land rich cases presents an interesting situation where what is virtually taken for granted in corporate finance theory is challenged in practice, with important flow-on tax implications. The aim of the paper is to conduct a conceptual re-evaluation of the relationship between the value of the total assets of an entity and its enterprise value.

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To this end, this paper re-evaluates the following conceptual issues:⁵

- > what is to be valued
- > the treatment of working capital assets in assessing Enterprise Value on a going concern basis
- > the distinction between the treatment of working capital assets on a going concern basis of valuation and a liquidation basis of valuation.

The re-evaluation of these issues, in turn, sheds light on the inappropriateness of the EV plus add-on method.

What is to be valued?

There are three important questions in terms of what is to be valued. These are: what standard of value to apply; the basis upon which the standard of value is applied; and what constitutes the total assets being valued.

The standard of value most frequently adopted in practice is market value. This is usually defined as the price that would be negotiated in an open and unrestricted market between a knowledgeable, willing but not anxious buyer (WBNAB) and a knowledgeable, willing but not anxious seller (WBNAS) acting at arm's length within a reasonable timeframe. For such participants, the value of any asset or entity is the present value of the expected future cash flows from the asset or entity.

The question of what is included in the total assets being valued is closely linked to the purpose of a going concern commercial business or enterprise. A going concern business consists of a collection of assets which are combined with the intention of generating profits or cash flows. Thus, there must be an economic correspondence between the composition of the total assets being valued and the cash flow generating capability of the going concern business. In addition, there must also be a consistency between the standard of value and the subject to which the standard of value is applied.

Because the standard of value is market value, which is forward-looking in nature and hence (technically) based on forward-looking cash flows, the total assets to which that standard of value is applied must be those assets which generate or support forward-looking cash flows of the entity (total cash flow relevant assets). In simple terms, the total assets that are to be valued must be those which match, not overstate or understate, the forward-looking cash flow generating capability of the business.

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Furthermore, since for stamp duty and tax purposes, the total assets being valued are generally a collection of assets owned by a going concern business, the sale of which triggers the assessment of tax and duty liabilities, they should be valued on a going concern basis.

Confusion and errors arise in practice partly from the failure to recognise the fact that total assets can be characterised in a valuation sense or in an accounting sense. The total assets whose market value is to be assessed must be the total cash flow relevant assets, rather than the total accounting assets or some mix thereof. This is because:

- > Total cash flow relevant assets include only true assets which, in an economic sense, contribute to the forward-looking cash flow generating capability of the entity. In contrast, total accounting assets, on the one hand, may not include all of the true assets which contribute to the forward-looking cash flow generating capability of the underlying business, due to idiosyncratic accounting conventions. On the other hand, they may include pure accounting entries which have little or no cash flow consequences and, hence, have little or no bearing on the forward-looking cash flow capability of the business⁶ and little or no market value.
- > Total cash flow relevant assets include opening net working capital assets which are, as explained below, consistent with the forward-looking cash flow generating capability of the entity as at that date, whereas total accounting assets include opening gross working capital assets, which inherently overstate the forward-looking cash flow generating capability of the underlying business.

The treatment of working capital assets in assessing Enterprise Value on a going concern basis

From an economic and valuation perspective, in the case of a capital intensive or land intensive business which has no material goodwill value, the collection of assets employed by the business to support and maintain its cash flow generating capability at a given point in time can be broadly classified into two distinct types:

- > *Primary or producing assets* e.g. mining rights, mining equipment, mining and transport infrastructure for a mining business or land assets and bed licences for a residential aged care business.
- > *'Stabilising' assets* e.g. cash holdings and inventories that act as a buffer for the smooth forward-looking exploitation of the primary or producing assets. For example, cash holdings are required when revenue will be received after operating expenses have to be paid. Similarly, holdings of raw materials and consumables are required for the uninterrupted exploitation of the primary assets.

From an accounting perspective, total accounting assets include gross working capital assets due to the need to separate accounting assets from accounting liabilities for accounting purposes. This reflects how financial statements are required to be presented for accounting purposes.

From an economic and valuation perspective, the relevant question is: what are the levels of investors' funds 'tied up in' or invested in 'stabilising' assets? This is because the outcome determines what is available as a buffer for the smooth forward-looking exploitation of the primary or producing assets to generate forward-looking cash flows.

Gross working capital assets for accounting purposes inherently overstate the market value of economic 'stabilising' assets because some of those gross assets are held to settle short-term liabilities arising from past production activities.⁷

At a micro level, the manner in which the expected cash flows from the business and its Enterprise Value reflect the impact of the 'stabilising' net working capital assets is quite subtle.

While being convenient and practical, the discounted cash flow model (DCF) modelling based on discrete periods of a reasonable length (say annual) does not show any timing mismatch arising *within* each annual period from revenue being received *after* operating expenses are paid, which underpins the necessity of the economic 'stabilising' assets discussed earlier.

In simple terms, despite these assets not being apparently visible due to the natural focus and design of an (annual) DCF model, they should be reflected in the present value of the expected cash flows from a business entity because they are economically necessary to the generation of the projected cash flows visible from such a DCF model. The size of the 'stabilising' net working capital assets is not necessarily the optimal or required maximum or minimum size of the economic buffer they constitute. It only reflects what is in place to perform the economic function of the stabilising assets. The amount in place is time, cycle and sometimes 'chance' dependent. The 'chance' dependency is partly attributable to the susceptibility of the available net working capital assets to 'noise' caused by delays associated with payments and receipts of cash flows arising from past activities. Any material departure from the necessary amount of net working capital assets caused by the chance dependency factor should be 'corrected' by subsequent working capital injections or withdrawals which are readily allowed for within the DCF modelling and reflected in the assessed Enterprise Value.

However, subsequent working capital injections or withdrawals (to move from the existing level of working capital assets to a desirable level of working capital assets in the future) are distinct from the existing net working capital assets that are in place to perform the economic function of the stabilising assets, which are reflected in the Enterprise Value of the business entity.⁸

The treatment of working capital assets on a going concern basis versus a liquidation basis

In assessing the Enterprise Value of a business which is a going concern business, the DCF modelling should naturally and technically pick up the cash flow impacts associated with the notional release of working capital on a net present value basis in the assessment of terminal value.⁹

However, confusion arises when the terminal value is assessed on a notional liquidation basis where the gross working capital assets as at the terminal date are used. In order to avoid this confusion, it is necessary to recognise that the terminal value assessed as part of the going concern Enterprise Value assessment is substantively different from terminal value assessed as at the terminal date on a standalone liquidation basis (i.e. in isolation from the going concern Enterprise Value assessment).

What needs to be assessed for tax and stamp duty purposes is the market value of total assets as at a valuation date, not the market value of total assets as at the terminal date. Because the business entity is still a long-lived going concern business, the going concern basis of valuation applies and the net working capital assets constitute the 'stabilising' assets as an appropriate constituent of the total cash flow relevant assets of the going concern business at that time.

Conclusion

In assessing the value of the total cash flow relevant assets as at a given valuation date, it is generally incorrect to apply any of the variants of the EV plus add-on method. The correctly derived Enterprise Value of a going concern business (based on market value of interest-bearing debt and equity) implicitly makes allowance for the cash flow impacts of working capital assets and liabilities. It therefore represents the market value of total assets relevant for tax and stamp duty purposes, and also implicitly includes net working capital assets.

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Notes

1. The authors would like to thank Michael Bradbury, Kevin Davis (the Managing Editor of *JASSA*) and an anonymous referee for providing insightful comments on earlier drafts of this paper.
2. In 'land rich' cases, the tax outcome depends either on the value of the land assets relative to the value of the non-land assets, or on the percentage of the value of land assets to total assets, depending on whether it is an income tax matter or stamp duty matter.
3. For simplicity, the present value effect is ignored.
4. For confidentiality reasons, we are unable to disclose specific details of these cases.
5. In order to simplify the analysis and avoid any confusion, we have assumed that the subject entity has no surplus assets. In practice, where there are surplus assets, the value of, or cash flows associated with, the surplus assets is usually separated from the present value of the expected cash flows from the core businesses of the entity. In such cases, it is common and appropriate to add the market value of the surplus assets to the enterprise value of the core business in assessing the overall enterprise value of the entity. However, this is substantively different from the various 'add-ons' that may be applied to EV under the EV plus add-on method, where there are no surplus assets.
6. Examples include unrecognised deferred tax assets, accounting deferred tax liabilities on wasting assets that will never be sold and contingent liabilities.
7. Gross accounting working capital assets also inherently overstate the economic stabilising assets in that they do not reflect present value.
8. The recognition of the distinct existing assets also implies that as long as these are 'employed' in the business, they should earn a fair return embedded in the total cash flows from the business.
9. Ultimately, working capital is released when the asset or enterprise terminates, at which time the net working capital flows to equity or debt. Assuming terminal value is correctly calculated in the DCF modelling, the present value of that release will be reflected in the EV. However, in practice, the terminal value is normally calculated by capitalising 'steady state' cash flows in perpetuity, where 'steady state' cash flows arise in the year in which there are no expected material changes in net working capital. Inherently, this does not allow for the ultimate release of working capital in the far distant future, although the present value impact of such treatment on the overall Enterprise Value assessment is generally immaterial.