Going concern versus liquidation valuations, the impact on value maximization in insolvency situations

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Insolvency is the unfortunate condition of a business that is unable to pay debts as they come due in the ordinary course of business, and/ or that has liabilities that exceed the total value of assets when both are assessed at their economic values.[1]

The valuation of businesses in insolvency is important to the creditors, shareholders, and other stakeholders as a basis for negotiations between these parties over the future of the business. For each stakeholder in an insolvent business, the relevant question is how to maximize its position.

It is also sometimes necessary to value insolvent businesses for the purposes of dispute resolution – for example, if a Claimant has been forced into insolvency by the wrongful actions of a Respondent.

The two main routes that an insolvent business can take are (a) to restructure its debts to manageable levels and continue trading as a *going concern*, or (b) to *liquidate* the business, selling off business or physical assets piecemeal, and returning the proceeds to creditors.[2]

Valuing an insolvent business therefore involves identifying alternative scenarios for the business, and identifying the value of the business overall in each scenario. For the purpose of restructuring an insolvent entity, each party will then typically identify the value it will achieve in each scenario, and enter negotiations over the future strategy of the business.

Types of insolvency

The ability of a business to pay its debts as they fall due is a measure of its short-term solvency, while a business with liabilities in excess of its debts is insolvent in the long-term.

A business that is unable to pay its debts as they fall due, but with assets in excess of its liabilities, may be able to avoid restructuring or bankruptcy if it is able to borrow against its assets – that is, to exchange some of the inherent long-run value in the business for cash, the ultimate short-term asset.

By contrast, a business that has liabilities in excess of its assets, but can meet its obligations in the short-term, requires restructuring but in the absence of immediate pressures from creditors may be able to choose the timing and nature of such restructuring. Restructuring may involve selling off certain assets, closing down certain activities, or writing down debts.

A business that is both unable to meet its short-term obligations, and with excess liabilities, will find itself in urgent need of restructuring.

Going concern vs liquidation value

In general, the stakeholders in a business, solvent or insolvent, can at any point decide to liquidate the business and invest the proceeds in other ventures. Stakeholders will continue to operate a business as

[1] Definition of Insolvency by Office of the Superintendent of Bankruptcy Canada.
[2] International Valuation Standards, Eight Edition; 2007. International Valuation Standards Committee.

a going concern only if the returns so generated exceed the returns that the stakeholders would expect from investing the proceeds of liquidation. Insolvent businesses differ from solvent businesses in that the need for a decision on the future of the business as a going concern or in liquidation is more or less urgent, while many solvent businesses continue for years without closely examining this question.

For example, consider a business owning and operating a hotel that is making profits of €1m a year and has no debts. This business is solvent. If the hotel could be sold for €5m, and returns on equity capital are 15%, then the owners of the hotel will prefer to operate the hotel as a going concern generating €1m a year than to sell the hotel and invest the proceeds elsewhere with the expected return of €750k a year (15% of €5m). However, if the hotel could be sold for €20m, the owners would prefer to sell (liquidate) and generate a €3m annual return (15% of €20m), than to realise the €1m a year profits in the hotel. In this way it may be profitable to liquidate a solvent business.

Now consider the same hotel business, with debts of €15m at a borrowing rate of 10%, giving rise to interest payments of €1.5m a year. This business is insolvent, in that it cannot meet its liabilities including interest payments as they become due from its €1m a year pre-interest profits. If the hotel can be sold for €5m, and the creditors force a liquidation, they will recover €5m of their loan and write off the remaining €10m of the €15m debts. If, however, the creditors accept a write-down of their debts to €9m, the hotel will be able to make the associated interest payments of €900k a year and continue as a going concern with after-interest profits of €100k a year, and the creditors will suffer a €6m write-down, smaller than the €10m write-down in the liquidation scenario. In this way, it may be beneficial for an insolvent business to continue as a going concern. If the hotel could be sold for €20m, then (as above) both the owners and the creditors would be better off liquidating the business.

The above example, although highly stylised, illustrates the importance to each group of stakeholders of identifying both the going concern and liquidation values of an insolvent business in deciding the appropriate course of action for that business.

In both the solvency and the insolvency scenarios above the business was more valuable to its stakeholders as a going concern when the value of the hotel asset was €5m, and more valuable liquidated when the value of the hotel asset was €20m. This illustrates that it is the profitability of an enterprise relative to the liquidation value of its assets, and not the current capital structure of the enterprise, that determines whether the enterprise is more valuable as a going concern or in liquidation.

As such, the problem of valuing insolvent businesses relates in the first instance to identifying its going concern value in comparison to its liquidation value, both assessed before repayment of debts. This measure of value is the so-called 'enterprise value' of a business, the value of the debt plus the equity in the business.

Going concern scenarios

Under a going concern approach, the insolvent business is considered as an operating entity.

A business with net assets but difficulties meeting its short-term obligations may be able to continue as a going concern by taking a number of short-run actions such as selling assets to raise cash, reducing capital or research and development expenditures, exiting loss-making segments of its business, or raising additional long-run debt against its net assets to meet obligations.

A business with net liabilities but no short-term difficulties will by contrast require restructuring of its debts if it is to continue as a going concern in the long term. This may involve renegotiating terms or writing

down debts with creditors, or exchanging debt for equity. [3] These negotiations and/ or restructuring can be achieved through private arrangements with stakeholders or through bankruptcy protection proceedings. Private arrangements often are much less costly than formal bankruptcy protection.[4]

Alternatively, stakeholders may receive the greatest recovery on their investment by selling the entire business to a third party, liquidating their position but preserving the business as a going concern. A business that does not have short-term financial difficulties but that faces the longer-term problem of net liabilities may be of value to a buyer in a number of ways.

First, the insolvent company may have competitors that have some strategic interest in acquiring the insolvent company. Strategic purchasers, such as competitors or those that would receive strategic benefit from the acquisition, would likely form the highest bidders for a company that is put up for sale. Such purchasers may also be in a position to offer short-run financing, the absence of which is causing the insolvency of the business being examined.

A strategic acquirer must be in a position that it could acquire the company without putting itself under financial distress. Moreover, if the insolvent company is experiencing distress due to wider market forces that are depressing a whole industry, there may be little appetite from competitors for an acquisition.

Second, if the industry in which the insolvent company is participating is fragmented or distressed, financial purchasers may exist who have adequate capital and management know-how to consolidate distressed companies into larger entities, gaining significant economies of scale. Furthermore, there is a sub-segment of investors, such as private equity funds focused on distressed entities, with an appetite for distressed companies. These investors often have turnaround expertise and may ultimately see potential economic benefits that others miss.

In the case of a business with short-run financial difficulties, a strategic or financial investor may also be in a better position to offer missing short-run financing than the current owner.

Going concern valuation approaches

A widely-used valuation benchmark is the concept of Fair Market Value, defined by the American Society of Appraisers as:

> "*The price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts*."[5]

The concept of Fair Market Value however has some difficulties in insolvency contexts, in which the value to specific owners of the business, in whole or in part, may be greater than the value that could be realized in a hypothetical transaction.

First, the concept of Fair Market Value may exclude prices that may be paid by "special purchasers", such as the strategic or financial buyers discussed above, that have unique perspectives on the relevant assets and therefore their own valuations of those assets.

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[3] Ross et al. Corporate Finance; First Canadian Edition. Richard D. Irwin Inc, 1995.
[4] Ross et al. Corporate Finance; First Canadian Edition. Richard D. Irwin Inc, 1995.
[5] ASA Business Valuation Standards (Business Valuation Committee American Society of Appraisers, Herndon, VA, 2009), American Society of Appraisers p 27.

Second, the definition of Fair Market Value assumes that both parties have reasonable knowledge of relevant facts and therefore, in liquidation, the prospective buyer would have reasonable knowledge of the circumstances facing the distressed seller. [6] This may not always be the actual situation in insolvency scenarios, which can be very fast-moving.

The problem of valuation in such circumstances therefore requires also determining the value of the relevant assets to specific possible owners. In the determination of value, in this case and generally, three approaches are generally relied upon: the income approach, the market approach and the asset or cost approach. Under the going concern premise, generally a market and income approach will be used in some combination.

Income approach

Under this approach the value of a company is determined based on the future economic benefits that it is expected to generate, taking into account the risks of achieving those economic benefits. The income approach would more typically be used under the assumption that an insolvent company is a going concern generating cash flows in the medium term and beyond. Forecasting cash flows is also necessary to see whether the company would be able to meet its newly-restructured obligations.

One of the two key inputs to the income approach is the underlying cash flow forecast. Valuers preparing their own cash flow forecast must proceed carefully to ensure that their assumptions are realistic – the results of the income approach can be very sensitive to the underlying assumptions. Valuers relying on forecasts prepared by others must scrutinise those forecasts as the original preparer may have some predisposition to bias in one direction or another – for example, a debtor may seek a low overall valuation in order to restructure as much of the debt in the company as possible, and a lower forecast may therefore be presented.

The recent history of a company must be taken into account in assessing its cash flows. A financially distressed company may have avoided much needed capital expenditures for a long period of time in an attempt to meet debt payments.[7] Likewise, a company with a key brand may have spent less on advertising than it typically would, and customer/ consumer awareness may have fallen as a result.[8] Consequently, additional 'catch-up' capital expenditure or marketing and advertising expenditures may need to be taken into account in the valuation.[9]

The Discounted Cash Flow (DCF) methodology is the standard method for implementing the income approach, however it is not without its drawbacks.[10] The discounted cash flow approach will typically use a weighted average cost of capital (WACC) to discount future cash flows to derive an enterprise value. The typical WACC implies a capital structure that is optimal, or rational for the business given the circumstances.[11]

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[6] Kantor, Mark. Valuation for Arbitration. Kluwer Law International, 2008. Pg 251.
[7] Cleveland. Jonathan B. Valuation in Bankruptcy and a Financial Restructuring Context. For the Canadian Institute of Chartered Business Valuators, July 15, 2003.
[8] Cleveland. Jonathan B. Valuation in Bankruptcy and a Financial Restructuring Context. For the Canadian Institute of Chartered Business Valuators, July 15, 2003.
[9] Cleveland. Jonathan B. Valuation in Bankruptcy and a Financial Restructuring Context. For the Canadian Institute of Chartered Business Valuators, July 15, 2003.
[10] Bernstiend, Stan, Susan H, Seabury and Jack F. Williams. Squaring Bankruptcy Valuation Practice with Daubert Demands.
[11] Cleveland. Jonathan B. Valuation in Bankruptcy and a Financial Restructuring Context. For the Canadian Institute of Chartered Business Valuators, July 15, 2003.

As the WACC employed in a DCF analysis is intended to discount future cash flows with appropriate risk adjusted required returns from debt and equity holders, it may be prudent to add a premium for restructuring risk. Under bankruptcy protection laws, if applicable, there is greater security as to the future viability of the company; however the entity remains more risky than if it had not been financially distressed. Although the nature of the protection laws serves to bring down the WACC closer to a normal market rate for debt and equity for a going concern with an appropriate capital structure, the application of a premium for restructuring risk is likely still a prudent part of the WACC.[12] This premium exists to account for the additional risk to the business of achieving the cash flow forecasts and successfully emerging from bankruptcy protection, and the risk that the proposed new capital structure will be effective and allow for the company to stay solvent.[13] Because the company by definition has a history of not meeting its debt obligations, the entity, even after restructuring, will be considered more risky than it would be without this history.

For example in the Nellson Nutraceutical Inc., Chapter 11 case in the US, valuation experts on behalf of the debtor and creditor as well as a third party expert to the court each presented valuation reports.[14] Two included an additional risk premium in calculation of cost of equity, which was ultimately adopted by the court.[15] The two percent premium was to account for increased risk to earning capacity as a result of Nellson Nutraceutical having recently been in bankruptcy. [16]

Market approach

In valuing businesses as a going concern under the market approach, a valuer will identify valuation metrics and multiples, such as enterprise value/ cash flow or value/ subscriber, from similar companies, and apply those ratios to the company being valued. These comparables may come from stock market prices or from M&A activity.

Public company comparables

The public company comparables method relies on ratios derived from the stock prices of a group of similar companies. The valuation metrics of these companies will then be applied to the financially distressed company. Metrics based on enterprise values, such as enterprise value/ operating cash flow (proxied by EBITDA, earnings before interest, tax, depreciation and amortisation), are generally used to avoid distortions due to differences in capital structure between the companies being compared. Basing valuation metrics on cash flow rather than earnings (measured after deducting interest, tax, depreciation and amortisation) is also advantageous as the earnings of insolvent companies can be very low or negative, distorting the results of the comparables analysis.

Care must be taken when using market based approaches to value financially distressed companies as the full value of the multiple or metric may not be an accurate reflection of an actual attainable price.[17] Even if the comparable companies are in the same line of business, a discount to the multiples may be

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[12] Pratt, Shannon P and Roger J Grabowski. Cost of Capital in Valuation of Stock by the Income Approach: Updated for an Economy in Crisis. The Value Examiner, January/February 2009.
[13] Pratt, Shannon P and Roger J Grabowski. Cost of Capital in Valuation of Stock by the Income Approach: Updated for an Economy in Crisis. The Value Examiner, January/February 2009.
[14] Pratt, Shannon P and Roger J Grabowski. Cost of Capital in Valuation of Stock by the Income Approach: Updated for an Economy in Crisis. The Value Examiner, January/February 2009.
[15] Pratt, Shannon P and Roger J Grabowski. Cost of Capital in Valuation of Stock by the Income Approach: Updated for an Economy in Crisis. The Value Examiner, January/February 2009.
[16] Pratt, Shannon P and Roger J Grabowski. Cost of Capital in Valuation of Stock by the Income Approach: Updated for an Economy in Crisis. The Value Examiner, January/February 2009.
[17] Newton, Grant W. Bankruptcy and Insolvency Accounting. Volume one; practice and procedure, seventh edition. John Wiley and Sons Inc, 2009.

appropriate given the level of financial distress.[18] However, if a whole industry is distressed, including the comparable companies being considered, an adjustment for financial distress may not be required.[19]

M&A Transaction Comparables

M&A activity can also give a useful market-based indicator of value. This approach involves applying multiples from market transactions to the subject company. Comparable companies may be very similar to the subject company, or the valuer may need to consider one or a number of adjustments to the benchmarks arising from the comparable companies in order to derive an applicable ratio. Once again, the distressed nature of the entity being valued must be taken into account. Other complicating factors may include the method of payment for the comparable transactions (i.e. all in cash or shares in escrow?).

Liquidation scenarios

The International Valuation Standards Committee has defined liquidation value as value arising in "… a situation where a group of assets employed together in a business are offered for sale separately, usually following a closure of the business."[20]

As such, liquidation values for particular assets are most closely associated to the concept of market value – the value that an asset could achieve if sold. However, market values may themselves be assessed by reference to the benefits that the sold assets may bring to the new owner (the stream of profits arising from a hotel, for example), that is by the income approach, and/ or by the cost to create a similar asset (the cost to build a similar hotel, for example), that is by the cost approach.

Expenses associated with liquidation (sales fee, commissions, taxes, other closing costs, administrative costs during close-out and loss of value in inventory) must also be estimated and deducted from the various asset values.

Considerations for liquidation value

As discussed above, the liquidation value of an insolvent entity sets a floor for the value of the entity, which may or may not have higher value as a going concern.

Tangible and intangible assets

Liquidated assets typically include: cash and working capital that can readily be realised for cash, such as accounts receivables and inventory; less liquid tangible assets, such as plant and equipment; identifiable intangible assets such as patents or brands; as well as business intangibles such as goodwill in the event that an part of the business being liquidated is sold as a going concern. The liquidation value of all types of asset may be more, or less, than their accounting value.

Working capital items, such as inventory and accounts receivable, are generally the easiest to liquidate. However, discounts to the typical values of such items are likely, as there may be additional costs of recovery of receivables in a business that customers no longer see as a key supplier. Moreover, outside the production context of the insolvent firm it may be harder to convert work-in-progress items into finished product. Relatedly, it may be hard to sell inventory of finished goods to final customers in the possible absence of the insolvent firm's normal sales and marketing team.

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[18] Newton, Grant W. Bankruptcy and Insolvency Accounting. Volume one; practice and procedure, seventh edition. John Wiley and Sons Inc, 2009.

[19] Fuhr, Elliot and Dewey Imhoff. The Credit Executive's Guide to Business Restructuring. FTI Consulting Inc, 2006. 155

[20] International Valuation Standards, Eight Edition; 2007. International Valuation Standards Committee.

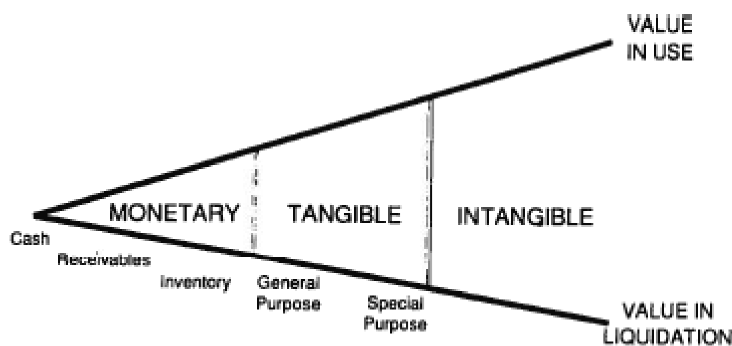
In accounting terms, tangible assets such as plant and equipment are generally depreciated over their useful lives, with the notable exception of land, which is not subject to any adjustment in value.

Identifiable intangible assets are classified separately and for accounting purposes amortized over the period for which they have perceived enduring value.

'Goodwill' in principle measures the difference between the value of a business's net assets and its overall value. In accounting terms, goodwill is recognised only in the context of an acquisition. Generally, in an insolvency situation, any goodwill in the insolvent company may have been severely impaired. Under the International Financial Reporting Standards (IFRS), the value of goodwill is assessed each year to ensure any impairment is recorded in the financial statements of the entity. Any impairment is usually derived from a review of the cash flows attributable to the business to which the goodwill is attached. However, in a fast-moving insolvency situation, the value of goodwill may have changed since the last valuation and the value ascribed to goodwill on a balance sheet value may be misleading.

Other assets are often not frequently revalued on company's balance sheets, and can be subject to particular accounting treatment. For example, real estate may be recorded on the balance sheet at its historic cost or on the basis of an old revaluation rather than its actual market value, which may be higher or lower than its historic cost. On the other hand, business goodwill must be stated at reduced, impaired, values in certain circumstances, but the value of goodwill on a balance sheet cannot be increased in the absence of a transaction in the associated business.

Traditionally, in liquidation the value of most intangible assets tends toward zero and the value of all tangible assets reflects the circumstance of liquidation.[21] The figure below gives an illustration of traditional values of tangibles and intangibles in an insolvency situation. The concept of 'value in use' here relates to the value of the relevant asset deployed within the insolvent business. Intangible assets such as patents and brands may have generated significant value for the insolvent business but be of limited use to third parties. Goodwill, the ultimate intangible asset, is essentially a measure of residual value and the fact of insolvency typically indicates that the value of any previously-existing goodwill is highly impaired.



Source: Smith, Gordon V. and Russell L. Parr. Valuation of Intellectual Property and Intangible Assets; Second Edition. Jon Wiley & Sons Inc, 1994.

The relative value of tangible and intangible assets changes by industry and over time. For example, technology companies have created large amounts of value principally based on intangible assets.

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[21] International Valuation Standards, Eight Edition; 2007. International Valuation Standards Committee.

Napster, one of the most popular peer-to-peer music downloading services in the early 2000s, became involved in copyright infringement lawsuits and ultimately filed for bankruptcy protection in an effort to re-launch its service.[22] A lack of revenues and high costs of litigation led to Napster filing for bankruptcy protection.[23] In bankruptcy, the Napster technology portfolio, brand name and trademarks were sold unencumbered in a competitive sale process for over $5 million.[24] Meanwhile tangible assets such as servers, routers, and computers were auctioned off at a later date.[25]

Forced vs. orderly

If a business is able to perform an orderly liquidation, without undue time pressure forcing it to enter into fire sale arrangements, it will typically achieve a better result for its stakeholders than in a forced liquidation.[26] An orderly liquidation will be a particularly appropriate response for a company that is able to pay its current debts but perceives long-term liabilities in excess of its assets and does not see going concern scenarios that are more favourable than an orderly liquidation.

If an orderly liquidation is chosen, and is expected to unfold over a significant period of time, the resulting valuation of the business may require discounting the resulting liquidation cash flows at a WACC, as in a DCF analysis.

Forced liquidations, by contrast, can lead to significant value destruction. The absence of time to market assets to potential buyers can lead to low realisation on asset values, and the inability to redeploy or wind down a workforce can in some countries trigger very high statutory redundancy payments.

Going concern in liquidation?

Under a liquidation premise, elements of going concern can still be found. While the total company may not be viable as a going concern, there may exist divisions of the business or operations that would be more valuable as a going concern than the liquidation of its individual assets.

For example, a consulting business recently found itself in a liquidation scenario, unable to meet its debt payments and, due to the loss of key staff, with limited prospects of trading sufficiently profitably in the long run to justify a restructuring. Certain parts of this business were trading profitably, however, and in order to maximise the recovery of its creditors the consulting company sold those teams as going concerns to competitors.

Other

Two further issues arise in the context of liquidations. First, liquidations may involve significant professional fees that need to be factored in to the values identified.

Second, if it is determined that the company is more valuable in liquidation absent special factors, sometimes considerations which have wider social, economic and political consequences can bring about government intervention to ensure the entity remains a going concern.

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[22] Collins, Megan. Napster files for bankruptcy. CNN Money, June 3, 2002. http://money.cnn.com/2002/06/03/news/companies/napster_bankrupt/

[23] Collins, Megan. Napster files for bankruptcy. CNN Money, June 3, 2002. http://money.cnn.com/2002/06/03/news/companies/napster_bankrupt/

[24] Napster sold to Roxio for $5.3 million. CNN Money, November 27, 2002. http://money.cnn.com/2002/11/27/news/deals/napster/index.htm

[25] Napster sells patents and brand name. BBC News World Edition, November 28, 2002. http://news.bbc.co.uk/2/hi/business/2522081.stm

[26] International Valuation Standards, Eight Edition; 2007. International Valuation Standards Committee.

Uncertainty, asymmetry, and the value of insolvent companies

The above discussion assumes that it is possible to identify with reasonable certainty the cash flows accruing to insolvent companies. In such situations, the identification of value can be performed by considering solely the central estimates of future cash flows. Although these central estimates may not in the event be completely accurate, they are in principle made on the basis so they are as likely to be optimistic as pessimistic, and that there is approximate symmetry between the positive payoffs in the case of a better-than-expected outcome and the negative payoffs in the case of a worse-than-expected outcome.

However, this is not always the case. A business that on a balanced estimate can be restructured as a going concern with a small loss to creditors may still, following restructuring, nevertheless be subject to a significant possibility of liquidation. In many countries employee lay-off costs can be very large. Moreover, firms in liquidation generally find it harder to collect their receivables, and may be forced to make fire sales of assets. The resulting expenses and losses in such a downside liquidation scenario may impose very considerable further write-offs on creditors, that are much larger than the gains that would be achieved if the business traded somewhat better than anticipated at restructuring. An assessment of the value of the restructured debt would need to take into account this significant chance of a much worse-than-expected outcome for creditors.

A related point underlies the tension between shareholders and creditors in insolvency situations. Shareholders face unlimited upside to their investment once creditors have been satisfied, but in financial terms are neutral between situations in which creditors achieve 99% recovery or 1% recovery. The positions of different creditor groups vary, but in essence a creditor group will have its capital returned if value above a certain threshold is achieved, and will for the large part be indifferent whether that value threshold is exceeded in small or in large part. As a result, for an insolvent business, shareholders will be willing to back high-risk ventures that have some chance of returning the business to solvency but are more likely to deepen the insolvency – ventures that are likely on balance to worsen the position of at least some creditor groups. Due to these different, and asymmetrical, returns in different value situations, shareholders and creditors can have sharply different views on the best path for the insolvent entity.

Summary

As with other valuations, valuation in an insolvency scenario requires being clear on the nature and purpose of the required valuation. For what purpose is the valuation being performed? For whose use, and what in particular are they interested in? What information is being used as the basis of the valuation, and is that information stated free of bias? What cross-checks can the valuer perform to gain comfort in the results of his or her valuation? Are there important asymmetries in outcome for relevant parties if things turn out slightly better, or slightly worse, than expected?

Turning to the impact on value maximisation in insolvency scenarios, the selection of a valuation basis (going concern or liquidation) does not directly affect value in insolvency scenarios. However, the selection of a *strategy* of going concern or liquidation may have a significant effect on the recovery of stakeholders in the insolvent business. Although each insolvent business is insolvent in its own unique way, in general a liquidation strategy is more likely to be safer but lead to lower recovery, while a going concern strategy will often be riskier but generate higher returns – the business could trade its way out of difficulty, or could incur further losses followed by a later liquidation.