

AN FTI CONSULTING REPORT – PUBLISHED 11/2023

Traded Debt Pricing

Considerations for Applying Secondary Debt
Traded Prices in Valuation



Abstract

Where a business is the issuer of debt which trades in the secondary markets, it is not uncommon to see the price of such debt referenced as a benchmark in valuations. These prices can be used to infer where the overall enterprise value of the business sits in the capital structure. Such benchmarks have been considered persuasive in certain court-sanctioned restructurings, such as Schemes of Arrangement.

Whilst such benchmarks, where available, should be considered, there are a number of limitations that valuers need to consider when deciding on how much emphasis to place on them in forming conclusions. In this context, we set out a summary of how these benchmarks can be applied, the limitations to be mindful of, and the skills and experience of relevant FTI Consulting experts.

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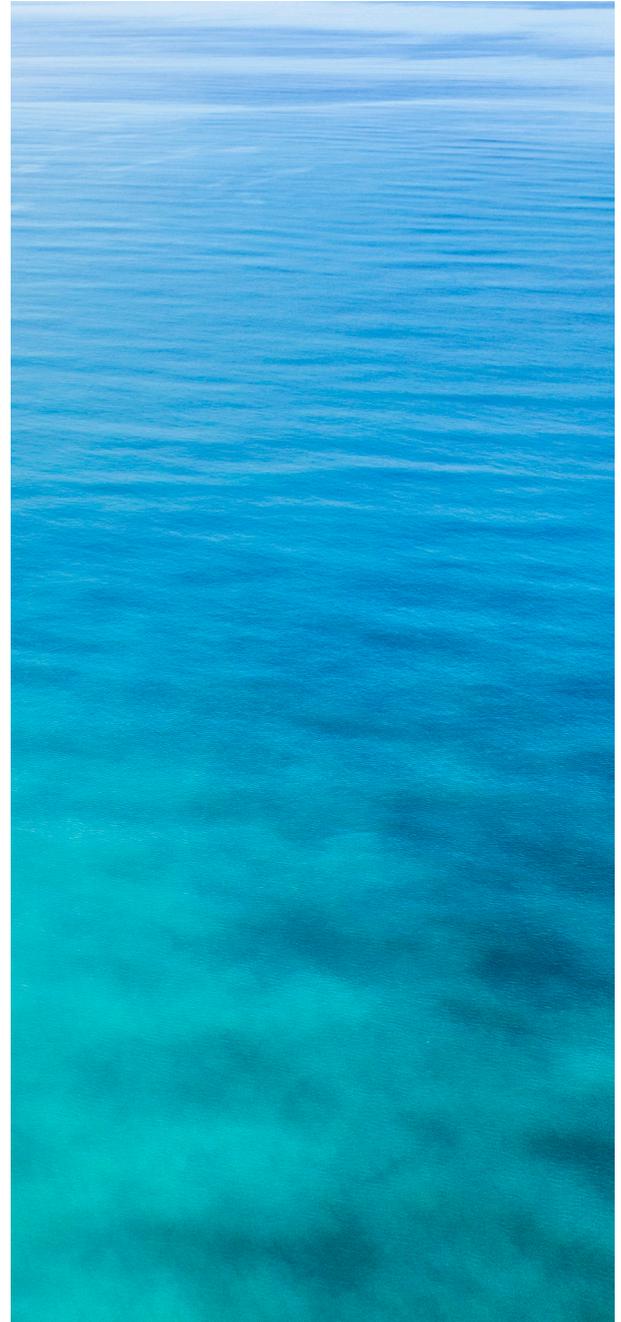
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Traded Debt Pricing in Valuation

It is not uncommon to see the price of traded debt instruments being adopted as benchmarks in valuations, particularly in restructuring contexts. Such benchmarks have intuitive appeal and should be considered where available. However, it is important that the valuer is mindful of their limitations.

Traded Debt Prices as a Valuation Benchmark

Enterprise value (“EV”), which is defined as the market value of a company’s equity value (“EqV”) and net debt, is the typical level of value adopted in restructuring contexts as the objective is to understand distributable value available to all sources of capital.

In situations where a private company has an outstanding piece of debt that trades on the secondary markets, it is common to see the traded price of such debt referenced as a valuation benchmark in determining an estimate of EV.

Such benchmarks should be examined where they exist, and can be compelling evidence. However, as set out below and throughout this article, there are a number of factors to be mindful of when drawing valuation inferences from them.

Applications in Restructuring Contexts

In their book entitled, “Restructuring Law and Practice”, the authors Howard and Hedger note “Secondary Debt Market Pricing” as a key valuation methodology. This book and the six key valuation methodologies it describes were referenced by Mr Justice Snowden in the context of assessing the likely outcome to dissenting creditors in the Virgin Active Restructuring Plan judgment.

Traded debt prices have also been adopted as reference points in high-profile court-sanctioned restructurings. For example, in the case of Stabilus (Scheme of Arrangement), the traded price of the senior debt was noted by Mr Justice Deer as providing “*strong corroborative force for the conclusion that the Mezzanine Lenders were ‘under the water’ by a very large margin*”.

Key considerations

Traded debt benchmarks offer intuitive appeal and can provide compelling evidence as to where value breaks within a company’s capital structure, and hence to infer its overall EV.

However, valuers should give thought to a number of factors when deciding how much emphasis to place on such benchmarks. For example, traded debt prices are driven by factors other than default/recovery risk, including, *inter alia*: (i) changes in market required returns (yields), the price impact of which increases as the duration of the fixed income instruments increases; (ii) the liquidity of the instrument, noting that the secondary markets for fixed income instruments are typically less liquid than for stocks which can lead to pricing being unreliable; (iii) the information available to assess the value of a debt instrument; (iv) the potential motivations of sellers and buyers which may relate to factors other than a pure assessment of the value of the debt instrument in question; and (v) the option value that can sometimes lead to debt and equity instruments trading at positive values even if the holders of those instruments would receive no recovery were a restructuring/exit event to occur as at the valuation date.

Finally, we note that valuations performed in restructuring contexts often adopt a distressed sale discount to an orderly sale process valuation to reflect the suboptimal sale conditions of a prescribed counterfactual. It is important therefore that the valuer is mindful that adopting the traded debt price benchmarks could lead to a double-counting of the discount for distress if the traded price already reflects market expectations for a disorderly restructuring or sales process.

The Intuitive Approach To Applying Traded Debt Values

The prices of traded debt instruments can be used both to infer the overall EV of a company and to indicate where value may break within the capital structure. It can be adopted as a primary valuation indicator. However, it is also often used to cross-check the reasonableness of other valuation methodologies e.g. DCF analysis.

Use of Traded Debt as a Valuation Benchmark

The prices of traded debt instruments can be used both to infer the overall EV of a company and to indicate where value may break within the capital structure.

The table below sets out a stylised example of this which reflects a standard formulation of such analysis. In this example:

- The company’s senior debt trades on the secondary markets, whereas its junior debt and equity are not traded.
- The senior debt matures in two years and is trading at 40% of its par value, equating to a 68% yield-to-maturity (“YTM”).

The significant discount to par at which the senior debt trades with just two years to maturity (and the resulting high YTM) is indicative of the market pricing-in material default/repayment risk to the instrument. The implication of this is that the market does not believe that the value of the company will be sufficient to fully repay the senior debt upon maturity either by (i) providing the capacity to fully-refinancing the debt or (ii) generate sufficient proceeds were the senior debt holders to take control of the business and force a sales process.

Given the senior debt has priority of claims on the value of the business over the junior debt and equity, it might be assumed that these instruments hold no material value, thus implying an EV of £200m.

Figure 1 – Stylised Example: Using Traded Debt to Infer EV

Instrument	Par (£m)	Traded?	Market Value %	Market Value (£m)
Senior debt	500	Yes	40%	200
Junior debt	150	No	0%	–
Total Debt	650		31%	200
Equity	n/a	No	0%	–
EV	n/a		n/a	200

The type of analysis set out opposite is equally applicable and useful in the context of financial restructuring negotiations as it is in standard going concern business valuation exercises where an assessment of EV is the objective.

We discuss on the following pages a number of limitations to adopting traded debt benchmarks in valuation. Where such limitations are applicable, it may well be appropriate to consider the traded debt approach as a cross-check to other valuation methodologies rather than a primary methodology. If a valuer concluded on an EV range for the company in the example opposite by reference to a DCF and multiples analysis that implied value breaks in the junior debt, the traded price of the senior debt should give the valuer cause to consider the specifics of this debt instrument and whether the conclusions should be reconsidered.

In a restructuring context, traded debt benchmarks have also been adopted as reference points in high-profile court-sanctioned restructurings. For example:

— **Stabilus (Scheme of Arrangement of 2012).**¹

Mr Justice Deer accepted the evidence that the senior debt was trading at a discount of between 40% and 70% as a useful benchmark to indicate the mezzanine debt had immaterial value concluding, “*it seems to me that the fact that the discount here was so substantial and that it continued consistently and continuously throughout this period provides strong corroborative force for the conclusion that the Mezzanine Lenders were ‘under the water’ by a very large margin.*”

— **Virgin Active (Restructuring Plan of 2021).**²

Mr Justice Snowden referenced the book entitled, ‘Restructuring Law and Practice’, by Howard and Hedger, and specifically the six valuation methodologies they note, of which secondary debt market pricing is one. Mr Justice Snowden referenced this work in the context of assessing the likely outcome to dissenting creditors in the Virgin Active Restructuring Plan judgment.

Limitations To Adopting Debt Prices as a Benchmark

When considering traded debt prices as benchmarks for inferring EV, valuers should be mindful that the prices of such instruments can be driven by factors other than default/recovery risk.

Factors That Drive Traded Debt Prices

When considering traded debt prices as benchmarks for inferring EV, valuers should be mindful that the prices of such instruments are driven by factors other than default/recovery risk.

Impact of market return requirements (yields), particularly with longer-dated financial instruments

The value of debt instruments with fixed coupons can change with overall market return requirements, even without any change in default risk.

- The sensitivity of the price of debt to changing return requirements is referred to as bond duration, which increases with (i) a longer period until maturity and (ii) a lower coupon rate. We illustrate this in Figure 2 below which shows 1 year bond prices falling only 2% versus 21% for 20 year bonds in response to the same 2% change in market yields.
- A current example of this effect can be seen on UK government bonds issued during 2020 at low coupon rates (0.13% - 0.5%) which now trade a discounts to par given the subsequent impact of high inflation and base rate increases on return requirements (discounts ranging 2% to 70% on the Jan-24 and Oct-61 issues respectively). It is unlikely default-risk is having a bearing on the price of UK Government Bonds.

Figure 2 – Sensitivity of Bond Values (All 5% Coupon but With Varying Maturities) To Market Return Requirements



Liquidity can be limited in secondary debt markets. This should be considered when deciding how much emphasis to place on debt price benchmarks

Unlike stocks, the secondary markets for most debt instruments are not exchanges. Most trades are arranged by brokers via over-the-counter transactions (OTC markets). OTC markets tend to be less regulated, transparent, and liquid than those for exchange-traded securities. There are a range of measures of liquidity, such as bid-ask spreads as a measure of transaction costs and turnover rates (daily trading volumes relative to outstanding units) as a proxy for market depth.

Valuers should consider the impact that low levels of liquidity could have on traded debt price benchmarks when deciding how much emphasis to place on them. For example, the traded prices reported for bonds with low turnover rates:

- May be stale and unreliable if the low turnover is reflective of them not having traded for some time leading up to the valuation. Even if traded as at the valuation date, the reliability of the observed prices may also be impacted if trading volumes are very thin.
- Might have been impacted substantially by large trades of a single or limited number of investors to the extent the low turnover rates are indicative of a low level of market depth. It may also be the case that the specific motivations for this (these) investors is not known. For example, they may be forced sellers, or investors who need to acquire a majority holding in the debt to achieve a particular outcome from a restructuring.

Information availability

The information rights of a debtholder will be governed primarily by the terms of the relevant financing agreement. In cases where information is limited (e.g. where financial information is dated), the ability of buyers and sellers to assess the fundamental value of the debt will be more challenging, likely resulting in traded prices that are less reliable valuation indicators than those that might be arrived at by a valuer with full information.

Valuers conducting EV assessments under a counterfactual situation e.g. the Relevant Alternative under a Restructuring Plan, should consider the potential that traded debt prices might already reflect the expectation of a disorderly restructuring or sales process when considering the application of a distressed sale discount.

Motivations of sellers and buyers can be a relevant factor

The motivations of sellers may relate to factors other than a pure assessment of the fundamental value of the debt instrument in question. As an example, we have worked on a case where a distressed fund acquired the mezzanine debt of an issuer (an industrial company of strategic national significance) in the secondary market, subsequently communicating its desire to pursue a loan to own strategy. It was put to us that the banks that held other positions in the company's debt effectively became forced sellers as they did not wish to be associated with such a scheme for reputation reasons. This had a material negative impact on the traded price of the debt (c. 15%).

Optionality can make it challenging to get a direct read across between traded prices of instruments and the value implied to them assuming a sale took place today

Debt instruments can have value even if it is known that the current EV of a company implies no payoff to equity or junior debt instruments in a sale today. The allocation of the current EV to the instruments in the capital structure will depend in part on whether there is option-like value available to the equity and junior classes.

We set out the factors that drive this optionality in more detail on the following page. However, the general principle is something a valuer should have in mind when considering what a traded debt price benchmark implies. For example, it may not be appropriate to ascribe nil value to junior debt classes and equity even if prior ranking senior debt classes are trading at a material discount to par.

Other Factors To Consider

Stakeholder/market views of the likely financial restructuring scenario could impact read across to OSP EV

In restructuring situations, valuations are often required to assume a suboptimal sale process e.g. an accelerated M&A process ("AMA") or sale from administration. Within a Scheme of Arrangement, a valuation prepared on this basis is referred to as the Comparator and as the Relevant Alternative in the case of a Restructuring Plan.

The approach taken by valuers to assess the EV of a business under such a counterfactual typically involves assessing the EV assuming an orderly sales process ("OSP") before applying a distressed sale discount to account for the suboptimal sale process and contract factors. Valuers should consider whether the prices of traded debt instruments might already reflect the expectation of a disorderly restructuring or sales process and hence whether the application of a distressed sale discount would in effect be double-counting the impact of the conditions anticipated under the counterfactual.

Concluding Remarks Regarding Limitations

The factors noted on the previous two pages are important to consider when assessing the strength of a traded debt benchmark and what conclusions can be derived from it, both relating to the overall EV of the company in question and the allocation of that EV to each creditor class in the capital structure.

Given the range of factors that can contribute to the traded price of a debt instrument, drawing firm conclusions can be difficult. For example, in the illustration previously set out in Figure 1, we assumed the senior debt was trading at a substantial discount to par (60% discount and 68% YTM). As such reasonable headroom exists to account for other factors when concluding that the junior debt and equity held immaterial value. However, had the senior debt been trading at small discount to par, a valuer drawing similar conclusions may well be challenged.

Option Value Effects in Distressed Situations

In distressed situations, equity and other impaired debt classes can take on option-like characteristics that can result in them having positive values even when prior-ranking classes trade at discounts to par. All else equal, this eventuality will become less likely as the restructuring/exit event approaches given option value is time-dependent.

Option Value Effects

In distressed situations, the value of the different instruments in the capital structure will vary depending on a range of factors including, *inter alia*, the following:

- Where current EV sits relative to the level of value at which the instrument participates e.g. is the instrument currently in or out-of-the-money.
- The payoff profile for the instrument e.g. fixed income instruments typically have a capped payoff (face value), whereas equity instruments have uncapped upsides.
- The potential pathway of EV until an exit, liquidation, or repayment event, principally driven by (i) the time available until such an event e.g. relating to liquidity position of the business or upcoming debt maturities and (ii) the volatility of the EV which can be driven by asset-specific or industry/economy-wide factors.

We illustrate this with a highly stylised example assuming a business with a current EV of £10m and a capital structure comprising (in order of seniority) (i) super senior debt of £5m (ii) senior debt of £5m and (iii) junior debt of £5m. Assuming no surplus cash implies net debt of £15m. Were an exit event to happen today, the super senior and senior debt would therefore be paid out in full, whereas the junior debt and equity would receive nothing.

Using a Black-Scholes approach, we set out in the charts below (Figure 3) how the value of each instrument varies as the key option-pricing parameters of time (here to exit or liquidation) and volatility are flexed.

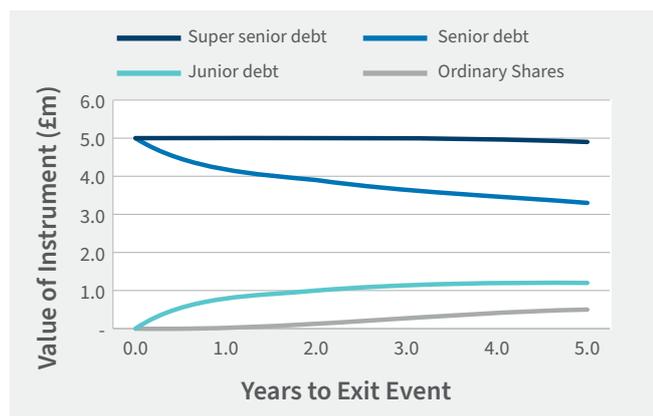
As can be seen, increasing the time and volatility parameters benefits the out-of-the-money classes (junior debt and equity), whilst damaging the value of the in-the-money super senior and senior debt classes.

This example serves to illustrate why equity, owing to its option-like characteristics in such distressed situations, may well trade at positive values even when prior-ranking debt instruments trade at discounts to their par value. It is also noteworthy that the value differential between in-the-money and out-of-the-money debt classes narrows considerably as both time and volatility increase.

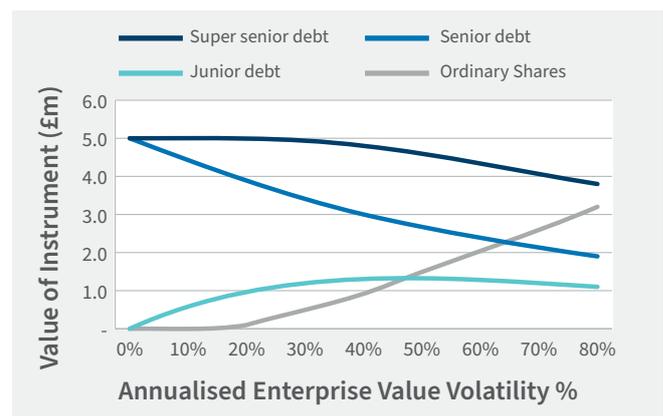
Finally, as previously noted, it is usually the case that traded prices will not be available for all the debt tranches within the capital structure. Where say just one price is available, the valuer could have regard to, *inter alia*, the parameters that drive option value and how they apply to the specific situation when considering the pricing that might apply to the non-traded debt classes i.e. not just considering their ranking in the capital structure.

Figure 3

Instrument Values by Year to Exit (At Constant Volatility of 20%)



Instrument Values at Varying Levels of EV Volatility (With Constant Exit Horizon of 2 Years)



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With more than 7,800 employees and offices in 31 countries on six continents, FTI Consulting's breadth and depth extends across every major social, political and economic hub around the globe.



Market leading UK restructuring team

Our UK restructuring team has been involved in many high-profile restructuring cases and frequently collaborates with our international colleagues to deliver on complex, cross-border cases.



Leading valuation and disputes team of expert witnesses

Our valuation and disputes team has extensive experience in providing expert evidence in courts and tribunals in restructuring situations, and over two times as many expert witnesses as our closest competitors (Who's Who Legal, 2023).



Dedicated restructuring valuation professionals

Allied to the UK restructuring team is a specialised and highly experienced valuations practice that has deep expertise in advising clients on valuation matters in the context of Schemes, Restructuring Plans, pre-packs, share pledge enforcements and share appropriations.

Resources

¹ [Virgin Active Holdings Ltd & Ors, Re \[2021\] EWHC 1246 \(Ch\) \(12 May 2021\) \(bailii.org\)](#)

² [Stabilus Group, Re \[2012\] EWHC 3025 \(Comm\) \(7 November 2012\) \(bailii.org\)](#)



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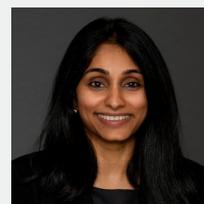
Alexis leads the valuation team in our EMEA Corporate Finance & Restructuring practice. He has provided valuation opinions in over 100 restructuring situations and has provided valuation opinions in the context of Restructuring Plans, Schemes, pre-packs, share pledge enforcements, and share appropriations. He also has significant transaction experience and has led several accelerated M&A processes.



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Pushpanjali has over 12 years of valuations experience which includes the valuation of companies, funds, and intangible assets across various industries in the context of transactions, corporate restructuring, expert determinations, financial reporting & fund valuations. Prior to joining FTI Consulting, Pushpanjali worked in Deloitte LLP's Valuation Advisory team.

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