The valuation of vendor securities in flotations presents a number of complications, ambiguities and contradictions, writes Wayne Lonergan.

One difficulty arises from the dubious view of the ASC that the markets themselves will decide the "fair value". This view overlooks the effect of the ASX's imposition of escrow periods on vendor shares.

Other problem areas include the long-term implications of royalty agreements.

It is widely accepted in the valuation of shares in unlisted companies that their value should be discounted to compensate for their lack of negotiability. Shares in private companies are much less negotiable than their listed counterparts for a number of reasons. The discount for non-negotiability reflects the usually significant delays and search costs in locating a purchaser for a minority share in a private company — if a purchaser can be found at all.

A minority shareholder in a private company can expect to receive a cash-flow of dividend payments plus the proceeds of eventual sale. However, there is no certainty of a minority shareholder ever being able to realise the benefit of his or her pro-rata share of the underlying value of the private company, particularly at the time the shareholder might wish. The only proceeds of sale that can be confidently expected depend on the capitalised future dividends at the time of sale. Therefore the level of future dividends is usually the key factor in determining the value of minority shareholdings in private companies (and even these dividends are likely to be uncertain).

Unlisted shares are also generally an unattractive investment, compared with listed shares, for other reasons:
- the articles of private companies frequently restrict their transfer; and
- there may be pre-emptive clauses which give the existing shareholders the right not only to acquire the shares but to have the price fixed by the auditors if the asking price is considered too high.

Shareholders in a private company are effectively at the mercy of the controlling shareholders in respect of not only their annual dividend income but also, because of the flow-on effect of dividend policy, the capital value of the shares and hence their fundamental value.

Private companies are generally smaller than listed companies, have less depth of management and have limited access to potential sources of additional equity capital in the case of need. These factors can add to the risk of investing in these shares and therefore reduce their value, compared with those of listed companies.

Discount for minority interests
A discount for minority interests reflects the relationship between the pro-rata value of a minority interest and the value of the whole of the equity. In particular, the discount reflects the absence of the power of control. For example, if a 20 per cent minority interest has a value of $15 then this implies a value for the whole entity of $75 (5 x $15). However, the value of the whole entity might be $100 or more because of such benefits as being able to access 100 per cent of the underlying cashflow, deal with surplus assets, utilise group tax losses, etc. The difference between the sum of the val-

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ues of the minority interests and the value of the entity as a whole is referred to as the premium for control.

Thus, in the above example, the discount for minority interest is 25 per cent (value of the whole $100 less the value of all minority interests of $75, divided by $100). Note that the premium for control over the minority value is 33 per cent ($100 - $75). Given the magnitude of the difference between the two measures, one should keep clearly in mind which is being used.

Blockage

The concept of blockage recognises that in some cases a large (but generally less than controlling) parcel of shares may not attract a willing buyer unless it is discounted from the prevailing market price. This discount arises because it may be difficult to sell large parcels of shares in the market without depressing the price, particularly where trading volume is low. In other cases, however, a parcel of shares may command a premium as a strategic or controlling interest.

Discount for lack of negotiability

The discount for minority interest is generally reflected implicitly in the valuation methodology used, rather than by deducting a percentage from the value of the whole company.

Reasons for this include:

- the takeover provisions of Corporations Law, ie, no holding greater than 20 per cent can be acquired without making an offer for the whole company;
- the relative attractiveness of the stock — "dogs vs starts";
- psychology — if the major shareholder is selling, why and
- institutions normally want market weighting, so the parcel must be split among a number of sophisticated players.

It is still theoretically the case that an appropriate percentage discount for the DCF method, applied from the perspective of the minority shareholder.

Discounts for minority interest based on the takeover premium method vary widely by industry, the year chosen and the research method selected (for example a premium over previous day, week or month).

There are sound economic reasons why minority shareholders in a private company are relatively worse off than those in a listed company. Minority discounts based on public company takeover premiums would therefore generally understate the discount applicable in private company valuations.

Australian studies of public company takeovers broadly indicate bid premiums around 33 per cent, implying a minority discount of 25 per cent (minority trading value + 33 per cent = value of entity, therefore ratio of minority interest discount to value of whole = 25 per cent).

US and Canadian studies indicate that higher bid premiums (generally 40 per cent or more) and hence higher discounts (around 30 per cent) may apply overseas.

The discount for lack of negotiability is a separate and additional discount which reflects lack of marketability or liquidity compared with an investment that can quickly be converted to cash at the owner’s discretion. It is important to distinguish between the discount for minority interests (assuming it is not already implicit in the methodology) and any separate and additional discount for non-negotiability that needs to be made. The principle is demonstrated in Table 1.
Accounting standard requirements
AASB 1015 requires that, for the purposes of recording a purchase transaction in the accounts and group accounts of the acquiring company, the same accounting principles apply irrespective of:
- whether shares or other assets are acquired;
- the number of shares or other assets acquired; and
- the form of the purchase consideration.

AASB 1015 covers all situations embraced by the definition of “acquisition” whether described by the acquiring company as an acquisition, a merger or a business combination. This means that where one or more assets are obtained in exchange for a cost of acquisition, an acquisition has been made and it should be accounted for in accordance with AASB 1015.

To reflect the economic substance of acquisition, AASB 1015 requires all acquisitions to be accounted for at their cost. From the acquiring company’s viewpoint, this cost is represented by the fair value of shares or other assets given up in making the acquisition.

Other costs relating to the acquisition normally include legal fees, stamp duty, other government charges and professional fees such as those for feasibility studies and investigations.

Accounting for goodwill
AASB 1013 provides that where the cost of acquisition exceeds the fair value of the identifiable net assets acquired the difference is goodwill, which is accounted for as a non-current asset and amortised over its expected life. The standard, however, requires that:
- goodwill arising on the acquisition of a subsidiary should only be reflected in the consolidated accounts and not the investee (paragraph 50); and
- internally generated goodwill is not to be brought to account.

Valuation of vendor securities
Since, under stock exchange rules, vendor securities will have to be held in escrow for between one and three years, it is clear that the value of the shares should be discounted for their diminished negotiability during this period.

However, the ASX is reluctant to specify the length of the escrow period until a final copy of the transaction document (such as a prospectus) is lodged with the exchange. The value of vendor consideration therefore cannot accurately determine in advance the effect of the escrow period on the value of the vendor securities.

What discount rate to apply
The range of discounts which a valuer could apply to vendor securities is extremely wide.

Private company discounts
The valuer’s discount applied to non-negotiable private company shares is frequently in the range of 25 to 30 per cent, given that their non-negotiability is virtually permanent. However, discounts as low as 10 per cent have been applied in some situations.

In the case of vendor securities, a discount of 25 to 30 per cent would be considered too high, since the shares are not non-negotiable in perpetuity and will be released from their escrow period three years or less from the date of issue.

It could be argued that because what is being held in escrow is the equity issued to the vendor, the applicable discount rate should be established by reference to a formal model such as the capital asset pricing model. But the vendor securities are normally “new” shares, with no historically measured beta factor available, leading to difficulties for the valuer. A practical solution might be to use the beta of the relevant industry sector, provided that the entity being floated is reasonably comparable with other listed entities in the sector.

The valuer of vendor consideration therefore cannot accurately determine in advance the effect of the escrow period.

Mining companies, however, often have high betas and the application of the CAPM formula to vendor securities in mining floats could result in a discount rate and by implication an allocation of equity to the vendors, that is unacceptably high.

Minimum rate
It could be argued that the absolute minimum discount rate for vendor securities would be the government bond rate for the equivalent duration.

However, the use of the government bond rate is considered inappropriate for a number of reasons. For example, given that this is, at least in theory, a risk-free rate, then some higher commercial rate should apply. Further, the bond rate is generally set in a liquid market and bonds can be traded relatively easily and cheaply. The bond rate does not reflect allowance for non-negotiability but simply the time value of money preference (ie, a $1 certain today vs a $1 certain in a year’s time).

This preference makes allowance for real interest rates and expected inflation over the period.

Another illustration of the relevance of liquidity is in housing-type loans. Whereas securitised mortgages are liquid, a bank making mortgage loans to homeowners is not; once the money is lent, the bank faces a long wait to regain its money.

It may be possible to use such examples (eg, the difference between the investment returns earned by the investor in the securitised mortgages and the bank) in estimating the pure liquidity discount.

Which valuation bases should apply
Further complications arise in the valuation of vendor securities depending on whether they represent a controlling or minority interest in the entity.

Where the vendor securities exceed 50 per cent of the enlarged capital of the company, the valuation principles applying to controlling interests, including an appropriate control premium, should generally be used.

Where the holding is less than half of the total, the situation can be complicated. A holding of 40 per cent, or even less, can represent a controlling interest if the rest of the shares are widely held.

Whether a substantial minority holding effectively represents a controlling interest (in which case majority-control valuation principles would apply) or a
minority interest (in which case minority principles may arguably apply) depends on the circumstances.

A situation is possible where a vendor could justifiably claim that no premium for control should be imputed to the value of the vendor securities and that, on the contrary, a discount for blockage should be allowed for.

What costs should be allowed for?

The following discussion assumes that the vendor shares constitute a controlling interest.

In using principles applicable to minority shareholdings it would appear reasonable to deduct share-issue, underwriting and other costs in arriving at the value of the controlling shareholder’s interest in the underlying equity (under AASB 1015 the stamp-duty costs of any acquisition would be capitalised).

Table 2 shows that in such a case a controlling 40 per cent interest would be valued at $1.8 million (40 per cent of $4.5 million). The subscribing public would be paying 20 cents per ordinary share whereas the value of the vendor shares clearly would not exceed 18 cents per ordinary share.

The example illustrates two complications:

■ to what extent should the float costs be allowed for in determining the value of the vendor shares (vendors find it difficult to understand why full allowance should not be made)?

■ how is the issue price of the shares of the minority incoming shareholders (in the above example 20 cents per share) reconciled with the fact that they are minority interests, whereas the value attributed to the majority shareholding (which would include its pro-rata share of any control premium) is 2 cents lower at 18 cents per share? Clearly, either the 18-cent value (before escrow adjustments) attributable to the vendor’s shares is clearly too low or the float price of 20 cents is too high.

Directors are obliged to issue shares to the public at no more than their fair value. It is also argued by the ASC that the first surrogate indication of the fair price of the vendor shares is the public issue price and the second surrogate is the public quoted price after listing. Both beliefs ignore the complications of the escrow period.

It is difficult to escape the question of how the public shareholders can justify paying 20 cents per ordinary share when the vendor’s shares are clearly worth only 18 cents. Indeed, why would the incoming shareholders be prepared to pay even 18 cents per ordinary share when they will be only minority shareholders with no stake in the control premium except in a takeover situation.

The ASC view

The current ASC view is that where vendor shares are issued as consideration or part consideration for the transfer of assets, then the fair value of the shares issued is determined by the price at which shares are subsequently issued to the public pursuant to the prospectus. Alternatively, the value may be determined by their subsequent market price.

The ASC also believes that in

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### Table 1: Discount for non-negotiability

<table>
<thead>
<tr>
<th>Description</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td>Reconciliation minority interest</td>
<td>100</td>
</tr>
<tr>
<td>Value of whole entity</td>
<td></td>
</tr>
<tr>
<td>Minority interest discount (1)</td>
<td>25</td>
</tr>
<tr>
<td>Combined value of minority interests in a listed company (2)</td>
<td>75</td>
</tr>
<tr>
<td>Less discount for non-negotiability (30%)</td>
<td>22</td>
</tr>
<tr>
<td>Combined value of minority interests in an unlisted company (3)</td>
<td>53</td>
</tr>
</tbody>
</table>

Notes:

1. With minority interest discounts of 25% demonstrated by public company takeovers a higher minority interest discount may be justifiable in a private company to reflect the additional unattractive features of being a minority interest in an unlisted investment.

2. The value of the parcel being valued will be calculated on a pro-rata basis relative to the number of shares being valued (for example, a 10% holding would be worth 7.5% of the value of the whole entity).

3. North American studies suggest even higher total discounts apply.

### Table 2: Value of controlling interest

<table>
<thead>
<tr>
<th>Description</th>
<th>$M</th>
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</thead>
<tbody>
<tr>
<td>Fair value of floated assets (net)</td>
<td>2.0</td>
</tr>
<tr>
<td>Cash raised in issue (No. of shares issued 15m x 20c)</td>
<td>3.0</td>
</tr>
<tr>
<td>Less: Cost of issue</td>
<td>0.4</td>
</tr>
<tr>
<td>Less: Stamp duty</td>
<td>0.1</td>
</tr>
<tr>
<td>NTA</td>
<td>4.5</td>
</tr>
</tbody>
</table>

### Table 3: Royalty sensitivity

<table>
<thead>
<tr>
<th>Description</th>
<th>500</th>
<th>600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold price per ounce (ie, turnover)</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Costs per ounce</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>Marginal income</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Royalty on sales at 2%</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>Effective percentage interest in net profit before tax</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
prospectus situations an appropriate level of goodwill should be raised in the float vehicle.

These views appear to ignore some important fundamental issues.

Vendor escrow period

Vendor shares, particularly in mining floats, are normally subject to escrow restrictions of between one and three years. For the reasons outlined above the imposition of escrow restrictions reduces the value of vendor shares compared with that of their publicly listed counterpart. The ASC view ignores this.

It is a long-established NCSC (now ASC) view that all shares in a takeover offer situation are of equal value.

However, the reality is that except in takeover situations the per-share value of a controlling interest generally exceeds the per-share value of a minority interest. The ASC view ignores the fact that the value of vendors' shares may contain a significant premium for control.

In many public floats, the correct accounting treatment of pre-float reconstructions under AASB 1013 and AASB 1015 precludes the recognition of internally generated goodwill. For example, where an asset, business or another subsidiary is sold by a parent company to another wholly owned subsidiary at fair value (including goodwill) the consolidated accounts of the parent company are not allowed to reflect goodwill. Indeed, they would not even be permitted to reflect the revaluation of assets sold inter-group unless there was a revaluation of the whole asset class at group level.

The nature of the existing group structure also has a major effect on accounting treatments. For example, if Company S is a subsidiary of Company P, and P's shares in S are sold by public float, no goodwill arises in S even if the issue price of company S shares exceeds their net asset value. This is because the excess represents internally generated goodwill to Company S and cannot be capitalised pursuant to AASB 1013 (and, because no “acquisition” has taken place, AASB 1015 does not apply).

Costs of issue

The effect of the ASC view is that share-issue costs (including prospectus and underwriting costs) are effectively treated as an increment to goodwill. There are some disagreements in the commercial and accounting community about whether share-issue costs should be written off against the share premium account or against profits. However, it is difficult to accept the effect of the ASC's view that the often significant share-issue and underwriting costs are effectively goodwill.

Vendor royalties

An increasingly frequent practice in company floatations (especially relating to mining) is for some royalty arrangement to be granted to the vendor.

In one recent public company flotation, proven (but not necessarily recoverable) underlying gold reserves at the time of flotation totalled 35,000 ounces. The arrangement was that if the operation recovered more than 50,000 ounces then the vendor would have a free carried interest equivalent to 2 per cent of the incremental gross value of the project over 50,000 ounces.

If the gold recovered does not exceed 50,000 ounces then the carried interest would have no value. If recovered reserves do exceed 50,000 ounces then future royalties payable to the vendor effectively increase the consideration received by the vendor. They also have the effect of reducing the otherwise unencumbered market value of the underlying prospect by the amount of the carried interest in excess of 50,000 ounces.

Such a royalty is similar in operation to an out-of-the-money option, although for the purposes of this paper the option valuation issues have been ignored.

If the vendor also has a shareholding (say 35 per cent) in the public company in the form of vendor shares, then 35 per cent of the reduction in the market value of the mine due to the royalty arrangement will be reflected in a fall in the value of the vendor's shares.

However, the total vendor consideration comprises the vendor shares and the right to receive the royalty, each of which has a separate value. For example, if the value of the royalty was effectively equal to a 5 per cent carried interest in the underlying mine, this would have an impact on the total consideration received by the vendor of only 3.3 per cent (65 per cent of 5 per cent).

Royalty interests vs profit interest

The assessment of the value of a royalty based on profit is relatively easy to make. The assessment of the value of a royalty based on turnover is often more complicated.

A royalty based on turnover is similar in concept to a carried interest in the underlying business. However, a royalty based on turnover will represent an effectively greater or lesser equity in the project and hence the value of the entity as a whole, depending on the relationship between operating costs and turnover (see Table 3).

In the event that the margin between the gold price and production costs is either less than or greater than the range demonstrated in the table, the effective carried interest in the project will vary accordingly.

Conclusion

No simple rule of thumb can be applied to all situations. The valuation of vendor securities needs to be determined according to the circumstances of the case.

However, the ASC's belief that the float price (and, worse still, the subsequent stockmarket price) determines the value of purchase consideration where vendor shares are issued is:

wrong in principle;

fails to allow for the depressant effect on value of the non-negotiability of vendor shares;

fails to distinguish between the per-share value of a minority and controlling shareholding; and

in some cases requires an accounting treatment which is inconsistent with Australian Accounting Standards.